

# **Decision Document**

**Solid Waste Management Units J-11/15  
Building 103-16 Landfill / Pile  
Hawthorne Army Depot  
Hawthorne, Nevada**



**February 2000**



Hawthorne Army  
Depot



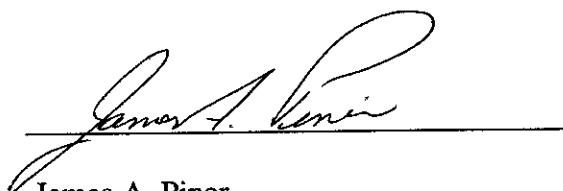
# Decision Document SWMU J-11/15

February 2000

The selected remedy is protective of human health and the environment. It has been shown that a complete pathway to human health and the environment does not exist, and there is no potential for an exposure pathway to be completed in the future.

U. S. Army

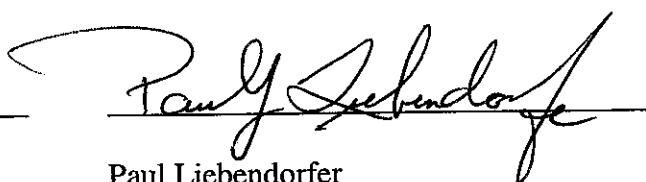
16 MAY 2000



James A. Piner  
Lieutenant Colonel, U.S. Army  
Commanding

State of Nevada

4 August 2000



Paul Liebendorfer  
Chief, Bureau of Federal Facilities

## **Decision Document**

**Solid Waste Management Units J-11/15  
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Hawthorne, Nevada**



**February 2000**



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**Decision Document  
SWMU J-11/15  
Building 103-16 Landfill / Pile  
HAWTHORNE ARMY DEPOT  
HAWTHORNE, NEVADA**

**1.0 Introduction:**

This decision document describes the rationale for the proposed closure of SWMU J-11/15, Building 103-16 Landfill / Pile, at the Hawthorne Army Depot (HWAD), Hawthorne, Nevada. This document was prepared by the U.S. Army Corps of Engineers, Sacramento District (USACE), with the help of HWAD from the Nevada Department of Environmental Protection (NDEP).

Tetra Tech, Inc. (Tt), was tasked by USACE, to perform remedial investigations and ground water monitoring at the HWAD. These tasks were conducted from 1993 through 1997, primarily at solid waste management units (SWMUs) designated by the Army and the Nevada Division of Environmental Protection (NDEP). The NDEP is the lead regulatory agency for environmental issues at HWAD. The purpose of the sampling was to determine the extent and degree of environmental impacts, if any, associated with activities performed at each SWMU. The primary goal of the investigation was to assess the environmental impacts and to report the findings, present conclusions, and recommend any remediation, deemed necessary.

With guidance from the NDEP, basewide proposed closure goals (PCGs) for soil were established as acceptable levels so that SWMU closure could be recommended and to assist in directing the investigative efforts toward those SWMUs where the target analytes were of greatest concern (Appendix A). These PCGs were used as action levels throughout this investigation and are used for comparison with the detected analytes in this report.

**2.0 Site History**

SWMU J11/15 is in HWAD's north magazine area, inside the Building 103 Group (Figure 1-1). This SWMU is approximately 1,000 feet west and southwest of the Building 103-16 catchment pits (SWMU B27a) and north of the west drainage ditch from this building (Figure 1-2). The eastern boundary of SWMU J11/15 also overlaps the western boundary of SWMU B27a. SWMU J11/15 is a former landfill area that had three pits and two scrap piles that were observed on a 1954 aerial photograph. However, during Tt's site inspection in 1993, the three pits were found to be filled, and the two piles had been leveled, leaving no surface expression of these features and no evidence of disposal in the area.

The USACE, HWAD, and the NDEP agreed to define the boundaries of each SWMU using annotated monuments and survey pins. As part of Tt's 1997 field investigations, two survey monuments were constructed and surveyed at SWMU J11/15. A brass survey pin on each monument designate the monument numbers HWAAP-27-1996 and HWAAP-66-1994 and the SWMU number J11/15. Two corner pins were set and surveyed to define a SWMU boundary, with the monuments at the west and east corners. The location of these corner markers and the SWMU boundary are shown on Figure 1-2. Survey data is presented in Appendix B.

### 3.0 Site Conditions

SWMU J11/15 was observed to be mostly flat with one small mound toward the eastern SWMU boundary and two sunken areas near the middle of the SWMU where the aerial photographs indicated three landfill disposal pits. This middle portion of the SWMU appears to have been backfilled with sand because there is a distinct change in soil type from this area to the outer boundary. Soils encountered to depths of about 35 feet bgs at this SWMU included poorly graded sand and silt with some intermittent layers of gravel. The surface soil in the backfilled area was mostly graded sand with rocks.

During Tt's 1997 ground water monitoring (Tt 1997a, 1997b), the depth to ground water was measured at approximately 80 feet below ground surface (bgs) at wells IRPMW24 and IRPMW25. These wells are approximately 2,300 feet cross-gradient to the northeast of the former locations of the pits at this landfill. Therefore, the ground water beneath SWMU J11/15 is expected to be at a depth of approximately 80 feet bgs.

### 4.0 INVESTIGATIONS

Tt's field screening activities during the 1994 and 1997 remedial investigations included geophysical surveys, a soil gas survey, headspace soil sample screening for VOCs in the subsurface soil samples, petroleum hydrocarbon screening, including screening for BTEX and PCBs constituents, visual screening for explosives on all soil samples, and explosives screening for cyclotrimethylenetrinitramine (RDX) and 2,4,6-trinitrotoluene (TNT). For this investigation, the geophysical surveys included a vertical magnetic gradient (MAG) survey, an electromagnetic terrain conductivity (EMAG) survey, and a surface ground penetrating radar (SGPR) survey. Target Environmental Services, Inc., (TES) conducted a soil gas survey to screen for VOCs in the near-surface soils. The intent of the soil gas survey was to assess if any areas within the SWMU contained high concentrations of VOCs in the soil gas. Twenty-five vapor monitoring probes were installed in an irregular pattern at SWMU J11/15 to depths of five feet bgs to collect the soil gas samples. Tt's sampling activities for the remedial investigation at SWMU J11/15 included collecting and analyzing surface and subsurface soil samples. Twenty-one surface soil samples, including two sets of split duplicate samples, were collected during the 1994 investigation of SWMU J11/15. Subsurface soil samples during the test pit/trench sampling, and Figure 3-1 illustrates the excavations' locations. Eight test pits

(TP01 through TP08), one 25-foot long by ten-foot deep trench (TR01), and six 20-foot long by five-foot deep trenches (TR02 through TR07) were excavated at SWMU J11/15. Thirty-seven subsurface soil samples, including four collocation duplicate samples, were collected from the sidewalls or bottom of the excavations at SWMU J11/15 using a backhoe

## 5.0 Investigation Results

Elevated concentrations of barium, cadmium, total chromium, and lead above their maximum expected background concentrations were found in most of the surface and subsurface soil samples collected at SWMU J11/15. Elevated concentrations of aluminum, beryllium, and arsenic were found only in the subsurface soil samples, and elevated concentrations of mercury were found only in the surface soil samples. The concentrations of total chromium exceeded its PCG in both the surface and subsurface soil samples, and concentrations of beryllium, cadmium, and lead exceeded their PCGs in the subsurface soil samples only. The lateral extent of the elevated metals concentrations appears to extend to at least five feet bgs in the landfill material, but does not appear to have impacted the native soil beneath the landfill area, based on the results of the samples from trench TR01. The extent of the metals contamination has not impacted the groundwater. The lateral extent of the elevated concentrations of metals appears to be within the landfill material, and varies in depth from near the surface to ten feet bgs.

Based on the interpretation of all of the TPH, BTEX, VOCs, SVOCs, and PCBs analyses, there are no concentrations of petroleum hydrocarbon fuels or constituents in the soils at SWMU J11/15 above their respective PCGs. Also, there is no evidence that these target analytes have impacted the ground water in the vicinity of this SWMU. The explosives at SWMU J11/15 were found only in the subsurface soil samples collected from the landfill material. All of these explosives concentrations were less than their respective PCGs. The results of the ahemical analysis is presented in appendix C.

Using the industrial PRGs, the estimated cancer risk at SWMU J11/15 of  $1.1 \times 10^{-7}$  is below this acceptable target risk threshold. Risk evaluation results therefore suggest that the levels of identified site contaminants in surface soils at SWMU J11/15 do not pose an unacceptable carcinogenic risk for on-site occupational receptors. Using the USEPA Region IX industrial PRGs, the estimated HI for SWMU J11/15 is 0.22, a value considerably below the threshold value of 1. Risk evaluation findings therefore indicate that the levels of identified site contaminants in surface soils at SWMU J11/15 do not pose an unacceptable noncarcinogenic hazard to on-site receptors.

## 6.0 Remediation

No remediation action was required for this site.

## 7.0 Remediation Results

Not applicable

## **8.0 Public Involvement:**

It is the U.S. Department of Defense and Army policy to involve the local community throughout the investigation process at an installation. To initiate this involvement, HWAD has established and maintains a repository library at the local public library. This repository includes final copies of all past studies and other documents regarding environmental issues at HWAD. As future environmental documents are made available to HWAD the repository shall be updated.

HWAD has solicited community participation in establishment of a restoration and advisory board (RAB). To date there has been insufficient response and HWAD has not formed a RAB. HWAD has held open houses to inform the public of on going environmental issues. HWAD shall continue to solicit community involvement, and will establish a RAB should sufficient community interest be obtained.

## **9.0 Conclusions**

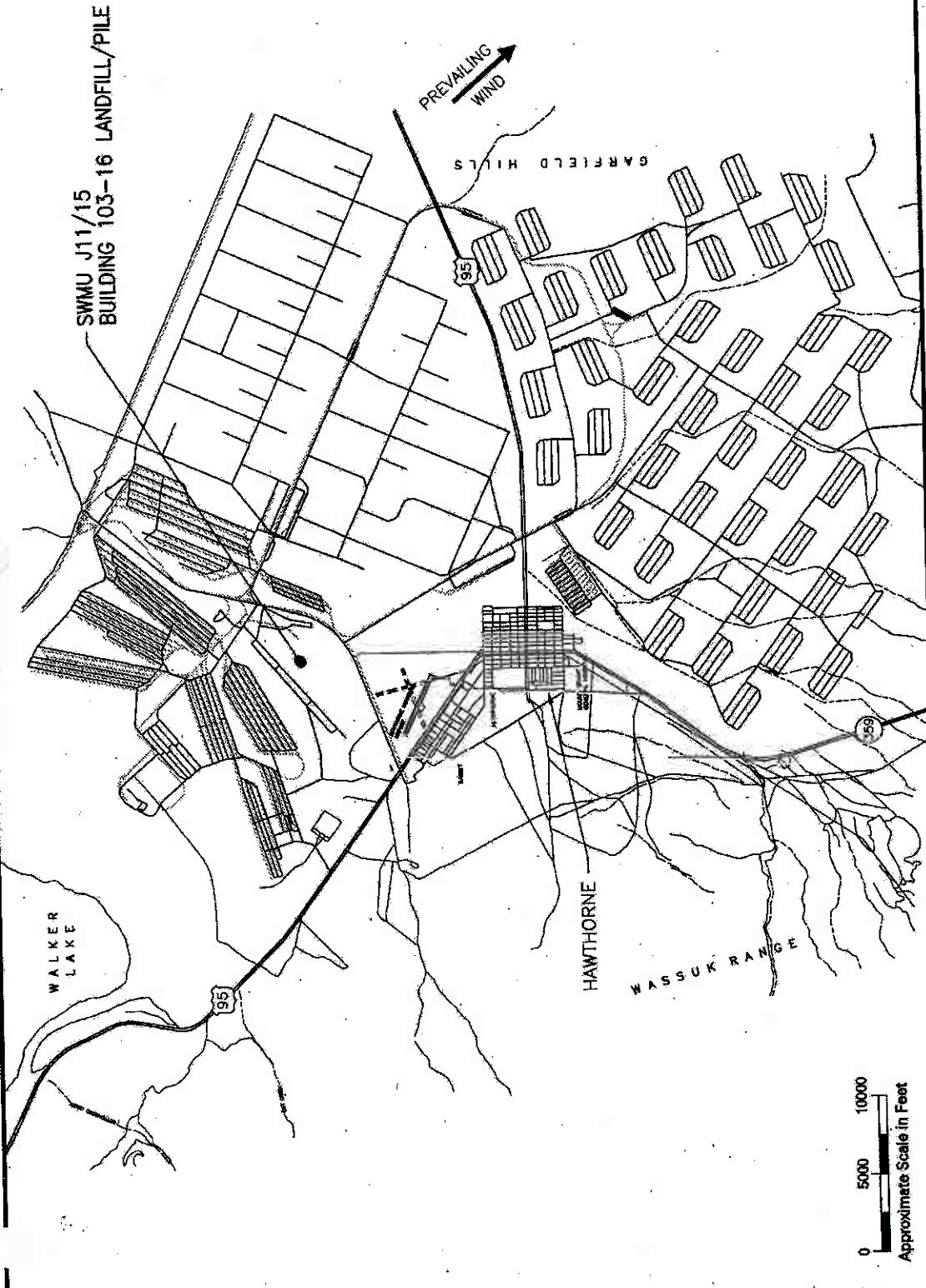
There is evidence of the chemicals of concern at SWMU J-11/15. However, the risk analysis indicates that the cancer risk level and the hazard index are below threshold values. SWMU J-11/15 should be closed, and documented on the depot site master plan with the site restriction that the site is for industrial use only.

## **10.0 REFERENCES**

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- EMSL. 1980. Aerial photographs of HWAAP, with overlays showing site locations identified by Art Gravenstein, NDEP.
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- Tetra Tech, Inc. (Tt). 1993. Draft Technical Memorandum for Group B SWMUs, Hawthorne Army Ammunition Plant. November 22, 1993.
- \_\_\_\_\_ 1994a. Hawthorne Army Ammunition Plant - Group B Remedial Investigation: Final Site Safety and Health Plan.
- \_\_\_\_\_ 1994b. Hawthorne Army Ammunition Plant - Group B Remedial Investigation: Final Work Plan. Two volumes.
- \_\_\_\_\_ 1994c. Hawthorne Army Ammunition Plant - Group B Remedial Investigation: Final Chemical Data Acquisition Plan.
- \_\_\_\_\_ 1997a. Final Quarterly Ground Water Monitoring Report, First Quarter 1997, Hawthorne Army Depot, Hawthorne, Nevada. September 1997.
- \_\_\_\_\_ 1997b. Quarterly Ground Water Monitoring Report, Second Quarter 1997, Hawthorne Army Depot, Hawthorne, Nevada. July 1997.
- \_\_\_\_\_ 1997c. Final Site Health and Safety Plan, Hawthorne Army Depot, Hawthorne, Nevada. February 1997.
- \_\_\_\_\_ 1997d. Final Data Package with recommendations for future action, Group B Solid Waste Management Units, Hawthorne Army Depot, Hawthorne, Nevada, Volumes 1, 2a, and 2b. January 1997.
- \_\_\_\_\_ 1997e. Final Sampling and Analysis Plan, Remedial Investigations, Groups A and B Solid Waste Management Units, Hawthorne Army Depot, Hawthorne, Nevada. February 1997.
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- \_\_\_\_\_. 1998. Final Investigation Report. Soild Waste Managament Unit J11/15  
Hawthorne Army Depot, Hawthorne, Nevada. December 1998.
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200-1-4). USACE. June 1995.
- USEPA. 1989. Risk Assessment Guidance for Superfund. Volume I Human Health  
Evaluation Manual (Part A). USEPA. December 1989.
- \_\_\_\_\_. 1996. Region IX Preliminary Remediation Goals. USEPA Region IX. August  
1996.



SOURCE: TETRA TECH FINAL DATA PACKAGE, 1996 (REV. 1997)  
F:\0082\32\swmu-map.dwg - 1/23/98 - HC

**Site Location Map  
SWMU J11/15  
Building 103-16 Landfill/Pile**  
Hawthorne Army Depot  
Hawthorne, Nevada

**Figure 1-1**



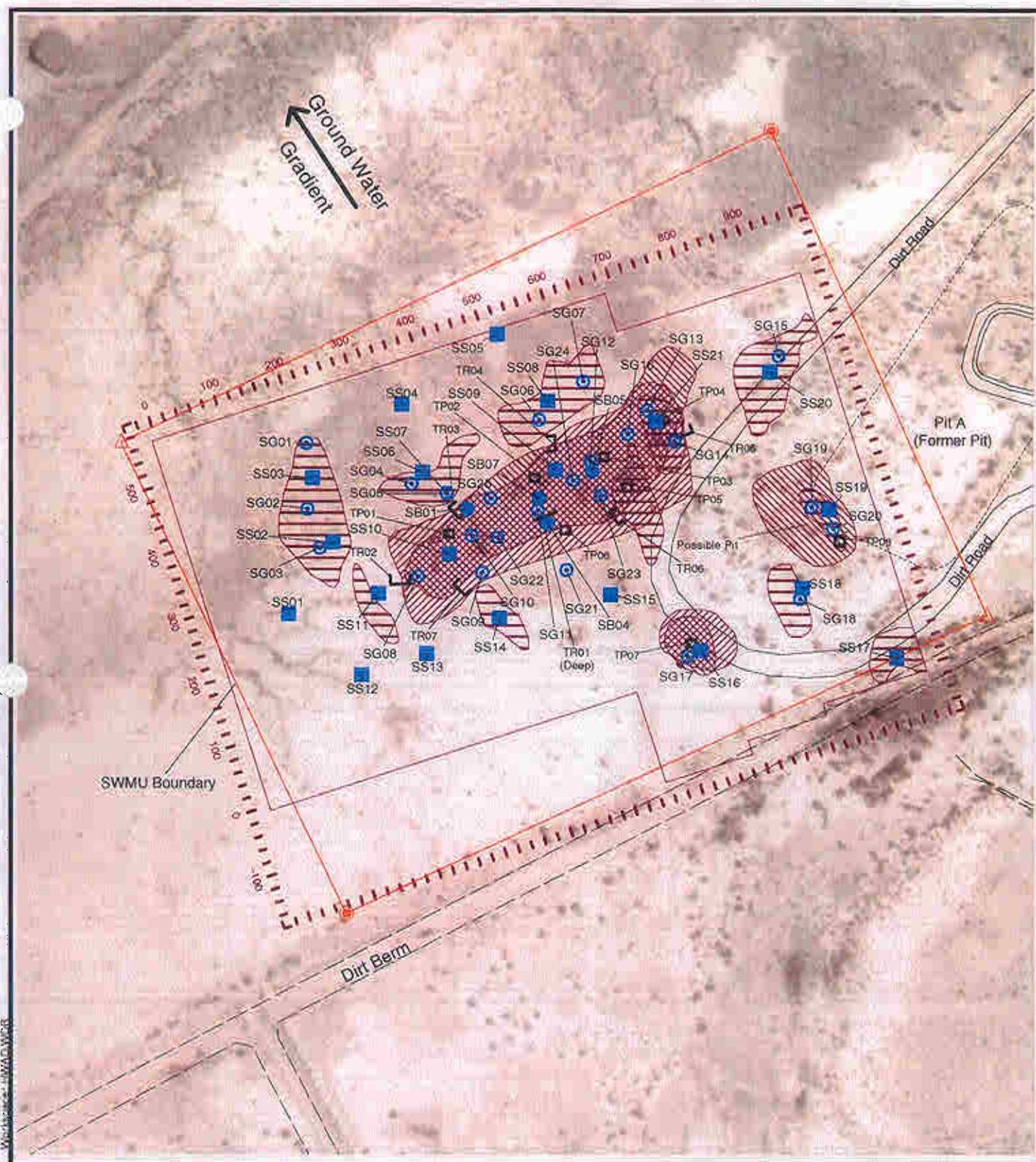
Legend:

- Boundary Corner Pin
- △ SWMU Monument

0 100 200  
Approximate Scale in Feet



**Site Map**  
**SWMU J11/15**  
**Building 103-16 Landfill/Pile**  
Hawthorne Army Depot  
Hawthorne, Nevada  
**Figure 1-2**



**Legend:**

- [Red Square] MAG Ariomaly
- [Red Circle] Boundary Corner Pin
- [Blue Square] EM Anomaly
- [Blue Circle] SWMU Monument

- [Blue Circle] Soil Boring Location
- [Blue Hatched Circle] SGPR Anomaly
- [Blue Circle with Dot] Soil Gas Location
- [Blue Square with Dot] Surface Soil/Sediment Sample

0 100 200  
Approximate Scale in Feet

**Investigation Activity Map**  
**SWMU J11/15**  
**Building 103-16 Landfill/Pile**  
Hawthorne Army Depot  
Hawthorne, Nevada  
**Figure 3-1**

## **Appendix A**

**Proposed Closure Goals**  
**Hawthorne Army Depot**  
**Hawthorne, Nevada**

Constituent of Concern	Chemical Classification	Carcinogenic (C) or Non-Carcinogenic (NC)	HWAD Proposed Closure Goals for Soil (mg/kg)	HWAD Proposed Closure Goal Source
Nitrate	Anion	NC	128,000	Calculated Subpart S <sup>a</sup>
2-Amino-dinitrotoluene	Explosive	NC	-	NA <sup>b</sup>
4-Amino-dinitrotoluene	Explosive	NC	-	NA <sup>b</sup>
1,3-Dinitrobenzene	Explosive	NC	8	Calculated Subpart S
2,4-Dinitrotoluene	Explosive	NC	160	Calculated Subpart S
2,6-Dinitrotoluene	Explosive	NC	80	Calculated Subpart S
HMX	Explosive	NC	4,000	Calculated Subpart S
Nitrobenzene	Explosive	NC	40	Calculated Subpart S
Nitrotoluene (2-, 3-, 4-)	Explosive	NC	800	Calculated Subpart S
RDX	Explosive	NC	64	Calculated Subpart S
Tetryl	Explosive	NC	800	Calculated Subpart S
1,3,5-Trinitrobenzene	Explosive	NC	4	Calculated Subpart S
2,4,6-Trinitrotoluene	Explosive	C	233	Calculated Subpart S
Aluminum	Metal	NC	80,000	Calculated Subpart S
Arsenic (cancer endpoint)	Metal	C & NC	30	Background <sup>c</sup>
Barium and compounds	Metal	NC	5,600	Calculated Subpart S
Beryllium and compounds	Metal	C	1	Background
Cadmium and compounds	Metal	NC	40	Calculated Subpart S
Chromium III and compounds	Metal	NC	80,000	Calculated Subpart S
Lead	Metal	NC	1000	PRG <sup>d</sup>
Mercury and compounds (inorganic)	Metal	NC	24	Calculated Subpart S
Selenium	Metal	NC	400	Calculated Subpart S
Silver and compounds	Metal	NC	400	Calculated Subpart S
Acenaphthene	PAH	NC	4,800	Calculated Subpart S
Benzo[a]anthracene	PAH	C	0.96	Calculated Subpart S
Benzo[a]pyrene	PAH	C	0.10	Detection Limit <sup>e</sup>
Benzo[b]fluoranthene	PAH	C	0.96	Calculated Subpart S
Benzo[k]fluoranthene	PAH	C	10	Calculated Subpart S
Chrysene	PAH	C	96	Calculated Subpart S
Dibenz[ah]anthracene	PAH	C	0.96	Calculated Subpart S
Fluoranthene	PAH	NC	3,200	Calculated Subpart S
Fluorene	PAH	NC	3,200	Calculated Subpart S
Indeno[1,2,3-cd]pyrene	PAH	C	-	NA
Naphthalene	PAH	NC	3,200	Calculated Subpart S
Pyrene	PAH	NC	2,400	Calculated Subpart S
Total Petroleum Hydrocarbons as Diesel (TPH-d)	PAH	C	100	NDEP Level Clean-up <sup>f</sup>
Polychlorinated biphenyls (PCBs)	PCBs	C	25	TSCA <sup>g</sup>
Bis(2-ethylhexyl)phthalate (DEHP)	SVOC	C	1,600	Calculated Subpart S
Bromoform (tribromomethane)	SVOC	C	89	Calculated Subpart S

**Proposed Closure Goals**  
**Hawthorne Army Depot**  
**Hawthorne, Nevada**

Constituent of Concern	Chemical Classification	Carcinogenic (C) or Non-carcinogenic (NC)	HWAD Proposed Closure Goals for Soil (mg/kg)	HWAD Proposed Closure Goal Source
Butyl benzyl phthalate	SVOC	NC	16,000	Calculated Subpart S
Dibromochloromethane	SVOC	C	83	Calculated Subpart S
Dibutyl-phthalate	SVOC	NC	8,000	Calculated Subpart S
Diethyl phthalate	SVOC	NC	64,000	Calculated Subpart S
Phenanthrene	SVOC	-	-	NA
Phenol	SVOC	NC	48,000	Calculated Subpart S
Acetone	VOC	NC	800	Calculated Subpart S
Anthracene	VOC	NC	24,000	Calculated Subpart S
Benzene	VOC	C	24	Calculated Subpart S
Bis(2-chloroisopropyl)ether	VOC	C	3,200	Calculated Subpart S
Bromomethane	VOC	NC	112	Calculated Subpart S
Carbon tetrachloride	VOC	C	5	Calculated Subpart S
Chlorobenzene	VOC	NC	1,600	Calculated Subpart S
Chloroform	VOC	C	115	Calculated Subpart S
Chloromethane	VOC	C	538	Calculated Subpart S
Dibromomethane	VOC	C	0.008	Calculated Subpart S
1,2-Dichlorobenzene	VOC	NC	7,200	Calculated Subpart S
1,4-Dichlorobenzene	VOC	C	18,300	Calculated Subpart S
Dichlorodifluoromethane	VOC	C	16,000	Calculated Subpart S
Ethylbenzene	VOC	NC	8,000	Calculated Subpart S
Methylene bromide	VOC	NC	800	Calculated Subpart S
Methylene chloride	VOC	C	4,800	Calculated Subpart S
2-Methylnaphthalene	VOC	-	-	NA
1,1,2,2-Tetrachloroethane	VOC	C	35	Calculated Subpart S
Tetrachloroethylene (PCE)	VOC	C & NC	800	Calculated Subpart S
Toluene	VOC	NC	16,000	Calculated Subpart S
1,1,1-Trichloroethane	VOC	NC	7,200	Calculated Subpart S
Trichloroethylene (TCE)	VOC	C & NC	480	Calculated Subpart S
Trichlorofluoromethane	VOC	NC	24,000	Calculated Subpart S
1,2,3-Trichloropropane	VOC	C	480	Calculated Subpart S
Vinyl chloride	VOC	C	0.37	Calculated Subpart S
Xylene Total (m-, o-, p-)	VOC	NC	160,000	Calculated Subpart S
2,3,7,8-TCDD	Dioxin	C	0.000005	Calculated Subpart S

<sup>a</sup> RCRA 55 FR 30870

<sup>b</sup> Not available

<sup>c</sup> Highest background concentration detected in 50 background soil samples

<sup>d</sup> Smucker, Stanford J. USEPA Region IX, Preliminary Remedial Goals, Second Half, Sep. 1995

<sup>e</sup> Method detection limit for Volatile Organic Compounds by EPA Method 8260 or

<sup>f</sup> Semi-Volatile Organic Compounds analyzed by EPA Method 8270

<sup>g</sup> Nevada Division of Environmental Protection

<sup>h</sup> Cleanup level for PCB spills in accordance with Toxic Substance and Control Act Spill Policy Guidelines 40 CFR 761

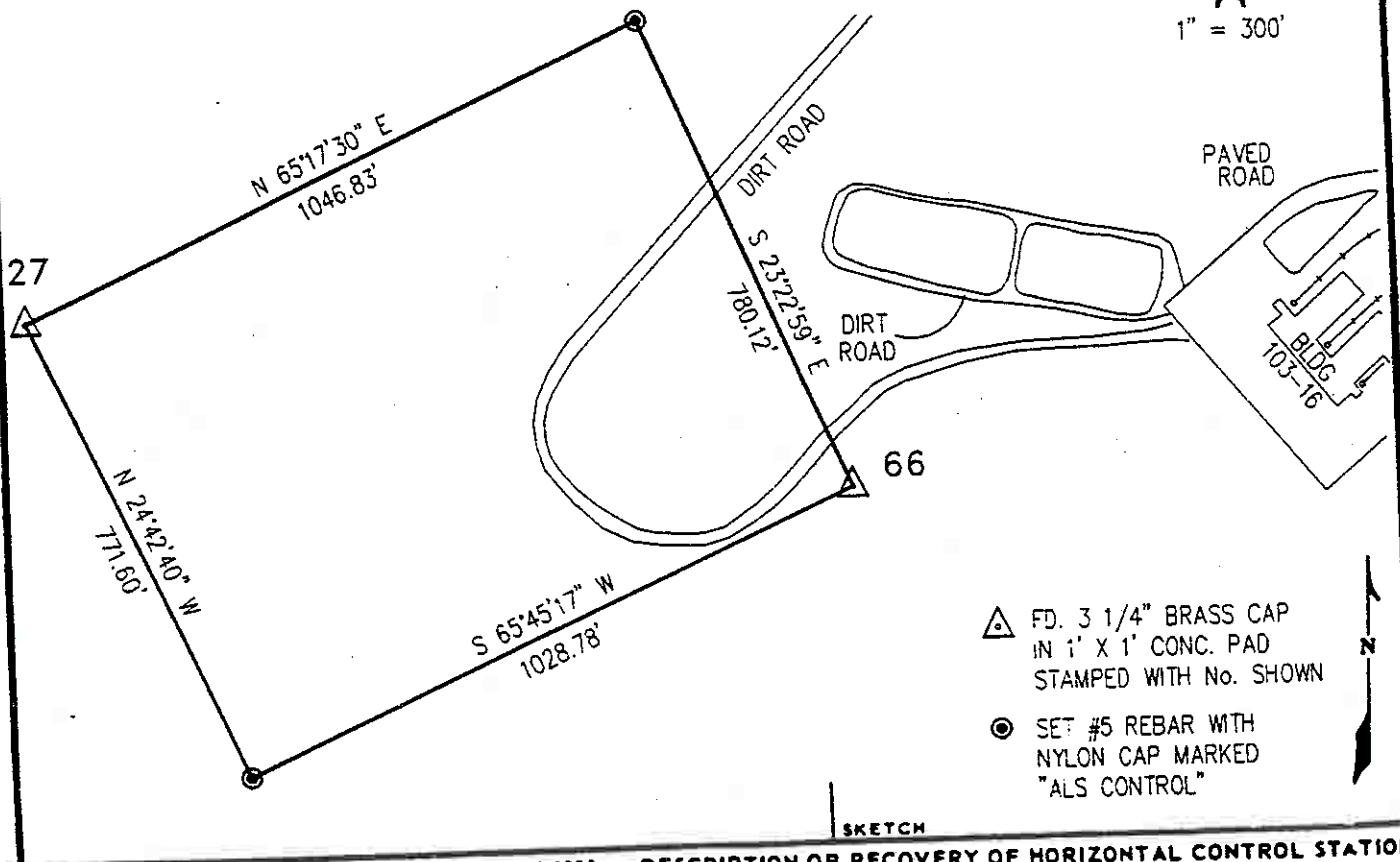
## **Appendix B**

COUNTRY <b>USA</b>	TYPE OF MARK <b>BRASS CAP</b>	STATION <b>27</b>	ELEVATION <b>4123.23</b> (FT) (M)	
LOCALITY <b>HAWTHORNE NEV.</b>	STAMPING ON MARK <b>27 J-11/15</b>	AGENCY (CAST IN MARKS) <b>COE HWAAP</b>	DATUM <b>NAD '27</b>	
LATITUDE <b>38°33'54.23741" N</b>	LONGITUDE <b>118°37'38.85648" W</b>	DATUM <b>NGVD '29</b>	ESTABLISHED BY (AGENCY) <b>A.L.S.</b>	
(NORTHING)(EASTING) <b>1388814.28</b> (FT) (M)	(EASTING)(NORTHING) <b>487383.39</b> (M)	GRID AND ZONE <b>NEVADA SP WEST</b>	DATE <b>1997</b>	
(NORTHING)(EASTING) (FT) (M)	(EASTING)(NORTHING) (M)	GRID AND ZONE	ORDER <b>2 ND</b>	
TO OBTAIN GRID AZIMUTH, ADD TO OBTAIN GRID AZ. (ADD)(SUB.)		TO THE GEODETIC AZIMUTH TO THE GEODETIC AZIMUTH		
OBJECT	AZIMUTH OR DIRECTION (GEODETIC)(GRID) (MAGNETIC)	BACK AZIMUTH	GEOD. DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
	° ′ ″	° ′ ″		

MONUMENTS 27 AND 66 - SWMU J-11/15  
 FROM HIGHWAY 95 TAKE THORNE ROAD NORTHEAST 3 MILES TO SALVAGE  
 ROAD, THEN GO NORTHWEST 1600 FEET ON SALVAGE ROAD, THEN SOUTHWEST  
 2800 FEET TO BUILDING 103-16. SEE MAP BELOW. MONUMENTS ARE 3  
 1/4" BRASS CAPS SET IN 1' X 1' CONCRETE PADS AND ARE MARKED WITH  
 4" X 4" X 6' WOOD POSTS, PAINTED WHITE.



1" = 300'



⚠ FD. 3 1/4" BRASS CAP  
IN 1' X 1' CONC. PAD  
STAMPED WITH NO. SHOWN

● SET #5 REBAR WITH  
NYLON CAP MARKED  
"ALS CONTROL"

SKETCH

DA FORM 1959 OCT 1959

REPLACES DA FORMS 1958  
AND 1960, 1 FEB 57, WHICH  
ARE OBSOLETE.

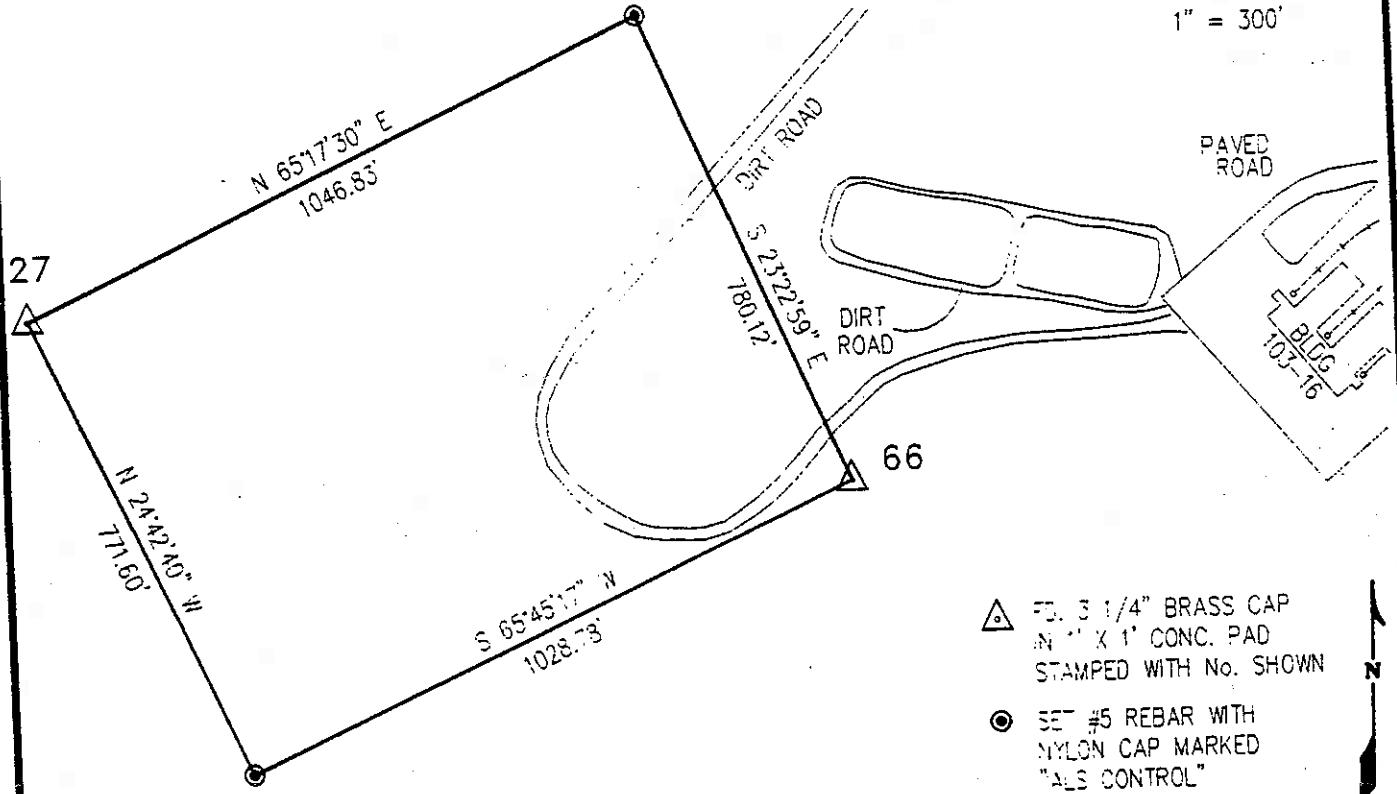
DESCRIPTION OR RECOVERY OF HORIZONTAL CONTROL STATION  
 For use of this form, see TM 5-237; the proponent  
 agency is TRADOC.

COUNTRY USA	TYPE OF MARK BRASS CAP	STATION 66	ELEVATION 4129.86 (FT)	
LOCALITY HAWTHORNE NEV.	STAMPING ON MARK 66 J-11/15	AGENCY (CAST IN MARKS) COE HWAAP	DATUM NGVD '29	
LATITUDE 38° 33' 51.49024" N	LONGITUDE 118° 37' 22.98280" W	DATUM NAD '27	ESTABLISHED BY (AGENCY) A.L.S.	
(NORTHING)(EASTING) 1388535.82 (M)	(EASTING)(NORTHING) 488643.98 (M)	GRID AND ZONE NEVADA SP WEST	DATE 1997	
(NORTHING)(EASTING) (FT)	(EASTING)(NORTHING) (FT)	GRID AND ZONE	ORDER 2 ND	
TO OBTAIN GRID AZIMUTH, ADD GRID AZ. (ADD)(SUB.) TO THE GEODETIC AZIMUTH				
TO OBTAIN GRID AZ. (ADD)(SUB.) TO THE GEODETIC AZIMUTH				
OBJECT	AZIMUTH OR DIRECTION (GEODETIC)(GRID) (MAGNETIC)	BACK AZIMUTH	GEOD. DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)

MONUMENTS 27 AND 66 - SWMU J-11/15  
 FROM HIGHWAY 95 TAKE THORNE ROAD NORTHEAST 3 MILES TO SALVAGE  
 ROAD, THEN GO NORTHWEST 1600 FEET ON SALVAGE ROAD, THEN SOUTHWEST  
 2800 FEET TO BUILDING 103-16. SEE MAP BELOW. MONUMENTS ARE 3  
 1/4" BRASS CAPS SET IN 1' X 1' CONCRETE PADS AND ARE MARKED WITH  
 4" X 4" X 6' WOOD POSTS, PAINTED WHITE.



1" = 300'



J11/15 Survey Data  
Hawthorne Army Depot  
Hawthorne, Nevada

SWMU	Point ID	Northing (feet)	Easting (feet)	Elevation
J11/15	HWAAP-27-1996	1388814.28	487383.39	4123.23
J11/15	HWAAP-66-1996	1388535.82	488643.98	4129.86
J11/15	Pin 1	1389251.86	488334.37	NE
J11/15	Pin 2	1388113.35	487705.95	NE
J11/15	SB01	1388706.66	487887.01	NE
J11/15	SB04	1388683.08	488004.41	NE
J11/15	SB05	1388759.48	488069.89	NE
J11/15	SB07	1388720.63	487991.88	NE
J11/15	SG01	1388808.92	487654.07	NE
J11/15	SG02	1388711.45	487654.61	NE
J11/15	SG03	1388654.10	487672.27	NE
J11/15	SG04	1388746.04	487807.0	NE
J11/15	SG05	1388730.16	487858.20	NE
J11/15	SG07	1388891.27	488057.48	NE
J11/15	SG08	1388608.87	487815.16	NE
J11/15	SG09	1388612.56	487908.32	NE
J11/15	SG10	1388667.65	487893.54	NE
J11/15	SG11	1388703.04	487989.88	NE
J11/15	SG12	1388773.26	488067.64	NE
J11/15	SG13	1388846.88	488151.30	NE
J11/15	SG14	1388800.47	488190.73	NE
J11/15	SG15	1388923.32	488342.75	NE
J11/15	SG16	1388812.79	488122.40	NE
J11/15	SG17	1388483.62	488206.08	NE
J11/15	SG18	1388565.21	488370.57	NE
J11/15	SG19	1388700.17	488388.38	NE
J11/15	SG20	1388667.83	488419.26	NE
J11/15	SG21	1388614.54	488031.04	NE
J11/15	SG22	1388664.39	487931.10	NE
J11/15	SG22	1388664.39	487931.10	NE
J11/15	SG23	1388723.00	488082.34	NE
J11/15	SG24	1388746.81	488041.34	NE
J11/15	SG25	1388721.38	487921.31	NE
J11/15	SS01	1388556.64	487625.92	NE
J11/15	SS02	1388661.68	487691.49	NE
J11/15	SS03	1388757.25	487662.06	NE
J11/15	SS04	1388862.55	487793.22	NE
J11/15	SS05	1388962.71	487932.04	NE
J11/15	SS06	1388762.37	487823.32	NE
J11/15	SS07	1388731.34	487857.62	NE
J11/15	SS09	1388761.73	488016.45	NE
J11/15	SS10	1388639.89	487860.88	NE
J11/15	SS11	1388584.78	487757.28	NE
J11/15	SS12	1388464.64	487731.23	NE
J11/15	SS13	1388494.07	487826.80	NE
J11/15	SS14	1388544.91	487932.43	NE
J11/15	SS15	1388576.46	488094.41	NE
J11/15	SS16	1388491.20	488225.30	NE
J11/15	SS17	1388475.24	488511.71	NE
J11/15	SS18	1388580.06	488373.77	NE
J11/15	SS19	1388695.63	488413.48	NE
J11/15	SS20	1388900.01	488329.63	NE
J11/15	SS21	1388830.94	488162.80	NE
J11/15	TP01	1388665.35	487854.90	NE
J11/15	TP02	1388745.59	487979.22	NE

J11/15 Survey Data  
Hawthorne Army Depot  
Hawthorne, Nevada

SWMU	Point ID	Northing (feet)	Easting (feet)	Elevation
J11/15	TP03	1388774.59	488081.25	NE
J11/15	TP04	1388826.59	488169.22	NE
J11/15	TP05	1388729.58	488114.20	NE
J11/15	TP06	1388667.53	488023.83	NE
J11/15	TP07	1388497.50	488205.84	NE
J11/15	TP08	1388643.67	488422.29	NE
J11/15	TR01	1388687.68	487983.92	NE
J11/15		1388702.88	488016.22	NE
J11/15	TR02	1388597.71	487775.24	NE
J11/15		1388611.66	487803.69	NE
J11/15	TR03	1388693.08	487860.46	NE
J11/15		1388718.25	487885.50	NE
J11/15	TR04	1388789.53	488004.22	NE
J11/15		1388812.66	488016.77	NE
J11/15	TR05	1388805.62	488191.27	NE
J11/15		1388825.12	488216.7517	NE
J11/15	TR06	1388679.83	488095.18	NE
J11/15		1388705.29	488117.3241	NE
J11/15	TR07	1388579.49	487866.77	NE
J11/15		1388603.88	487891.1765	NE

Notes:

NE = Not established.

Coordinate data based on electronic map file using the NAD 1927 datum.

Elevation data based on surveyors map using NGVD 1929 datum.

## **Appendix C**

PCB Test Kit  
Method 4020 (Tt Field)

Sample ID	Location ID	Sample Date	Depth (feet)	Lab	PCB
					mg/kg
J11/15-SS01-1-S	SS01	7/16/94	0	Tt Field	X<1
J11/15-SS02-1-S	SS02	7/16/94	0	Tt Field	X<1
J11/15-SS03-1-S	SS03	7/16/94	0	Tt Field	X<1
J11/15-SS04-1-S	SS04	7/17/94	0	Tt Field	X<1
J11/15-SS05-1-S	SS05	7/17/94	0	Tt Field	X<1
J11/15-DP096	SS05	7/17/94	0	Tt Field	X<1
J11/15-SS06-1-S	SS06	7/16/94	0	Tt Field	X<1
J11/15-SS07-1-S	SS07	7/16/94	0	Tt Field	X<1
J11/15-SS08-1-S	SS08	7/17/94	0	Tt Field	X<1
J11/15-SS09-1-S	SS09	7/16/94	0	Tt Field	X<1
J11/15-DP085	SS09	7/16/94	0	Tt Field	X<1
J11/15-SS10-1-S	SS10	7/16/94	0	Tt Field	X<1
J11/15-SS11-1-S	SS11	7/16/94	0	Tt Field	X<1
J11/15-SS12-1-S	SS12	7/16/94	0	Tt Field	X<1
J11/15-SS13-1-S	SS13	7/16/94	0	Tt Field	X<1
J11/15-SS14-1-S	SS14	7/16/94	0	Tt Field	X<1
J11/15-SS15-1-S	SS15	7/17/94	0	Tt Field	X<1
J11/15-SS16-1-S	SS16	7/17/94	0	Tt Field	X<1
J11/15-SS17-1-S	SS17	7/17/94	0	Tt Field	X<1
J11/15-SS18-1-S	SS18	7/17/94	0	Tt Field	X<1
J11/15-SS19-1-S	SS19	7/17/94	0	Tt Field	X<1
J11/15-SS20-1-S	SS20	7/17/94	0	Tt Field	X<1
J11/15-SS21-1-S	SS21	7/17/94	0	Tt Field	X<1
<hr/>					
Analyses					23
Detections					0
Minimum Concentration					0
Maximum Concentration					0
<hr/>					
HWAD - PCG					NE
HWAD - PCG Hits					NE

Notes:

NE = Not established.

Duplicate Samples:

J11/15-DP085 is a duplicate sample of J11/15-SS09-1-S.

J11/15-DP096 is a duplicate sample of J11/15-SS05-1-S.

TPH Test Kit  
Method 4030 (Tt Field)

Sample ID	Location ID	Date (feet)	Sample Depth	Lab	TPH-d	TPH-d (Rerun)		TPH-d-Dup
						mg/kg	mg/kg	
J11/15-TP01-1-S	TP01	3/1/97	5	Tt Field	0<X<20	NA	NA	
J11/15-TP01-2-S	TP01	3/1/97	5	Tt Field	0<X<20	NA	NA	
J11/15-TP01-3-S	TP01	3/1/97	1.5	Tt Field	0<X<20	NA	0<X<20	
J11/15-TP02-1-S	TP02	3/1/97	5	Tt Field	0<X<20	NA	NA	
J11/15-TP02-2-S	TP02	3/1/97	1.5	Tt Field	0<X<20	NA	NA	
J11/15-TP03-1-S	TP03	3/1/97	5	Tt Field	0<X<20	NA	NA	
J11/15-TP03-2-S	TP03	3/1/97	2	Tt Field	0<X<20	NA	NA	
J11/15-TP04-1-S	TP04	2/28/97	5	Tt Field	100<X<500	NA	X<0	
J11/15-TP04-2-S	TP04	2/28/97	2	Tt Field	100<X<500	NA	NA	
J11/15-TP05-1-S	TP05	3/1/97	5	Tt Field	0<X<20	NA	NA	
J11/15-TP05-2-S	TP05	3/1/97	5	Tt Field	0<X<20	NA	0<X<20	
J11/15-TP06-1-S	TP06	3/1/97	5	Tt Field	X<0	NA	NA	
J11/15-TP06-2-S	TP06	3/1/97	5	Tt Field	0<X<20	NA	NA	
J11/15-TP06-3-S	TP06	3/1/97	1.5	Tt Field	0<X<20	NA	NA	
J11/15-TP07-1-S	TP07	2/28/97	5	Tt Field	100<X<500	0<X<20	NA	
J11/15-TP07-2-S	TP07	2/28/97	1.5	Tt Field	100<X<500	NA	NA	
J11/15-TP08-1-S	TP08	2/28/97	5	Tt Field	100<X<500	0<X<20	NA	
J11/15-TP08-2-S	TP08	2/28/97	2	Tt Field	100<X<500	NA	NA	
J11/15-TR01-1-S	TR01	3/1/97	5	Tt Field	100<X<500	0<X<20	NA	
J11/15-TR01-2-S	TR01	3/1/97	10	Tt Field	100<X<500	NA	NA	
J11/15-TR01-3-S	TR01	3/1/97	10	Tt Field	100<X<500	NA	NA	
J11/15-TR01-4-S	TR01	3/1/97	5	Tt Field	100<X<500	0<X<20	NA	
J11/15-TR01-5-S	TR01	3/1/97	10	Tt Field	100<X<500	20<X<100	NA	
J11/15-TR02-1-S	TR02	3/1/97	5	Tt Field	100<X<500	NA	NA	
J11/15-TR02-2-S	TR02	3/1/97	5	Tt Field	100<X<500	0<X<20	NA	
J11/15-TR03-1-S	TR03	3/1/97	5	Tt Field	100<X<500	NA	NA	
J11/15-TR03-2-S	TR03	3/1/97	5	Tt Field	100<X<500	NA	NA	
J11/15-TR03-3-S	TR03	3/1/97	5	Tt Field	100<X<500	NA	NA	
J11/15-TR04-1-S	TR04	3/1/97	5	Tt Field	100<X<500	NA	NA	
J11/15-TR04-2-S	TR04	3/1/97	5	Tt Field	100<X<500	NA	NA	
J11/15-TR05-1-S	TR05	2/28/97	5	Tt Field	100<X<500	NA	NA	
J11/15-TR05-2-S	TR05	2/28/97	5	Tt Field	100<X<500	NA	NA	
J11/15-TR06-1-S	TR06	2/28/97	6	Tt Field	100<X<500	NA	NA	
J11/15-TR06-2-S	TR06	2/28/97	5	Tt Field	100<X<500	NA	NA	
J11/15-TR07-1-S	TR07	3/1/97	5	Tt Field	0<X<20	NA	NA	
J11/15-TR07-2-S	TR07	3/1/97	5	Tt Field	0<X<20	NA	NA	
J11/15-TR07-3-S	TR07	3/1/97	5	Tt Field	0<X<20	NA	NA	
<b>Analyses</b>					37	6	3	
<b>Detections</b>					0	0	0	
<b>Minimum Concentration</b>					0	0	0	
<b>Maximum Concentration</b>					0	0	0	
<b>HWAD - PCG</b>					NE	NE	NE	
<b>HWAD - PCG Hits</b>					NE	NE	NE	

Notes:

NA = Not analyzed.

NE = Not established.

Duplicate Samples:

J11/15-TP01-2-S is a duplicate sample of J11/15-TP01-1-S.

J11/15-TP06-2-S is a duplicate sample of J11/15-TP06-1-S.

J11/15-TR01-2-S is a duplicate sample of J11/15-TR01-1-S.

J11/15-TR03-2-S is a duplicate sample of J11/15-TR03-1-S.

BTEX Test Kit  
Method 4031 (Tt Field)

Sample ID	Location ID	Date	Depth (feet)	Lab	BTEX
					mg/kg
J11/15-SS01-1-S	SS01	7/16/94	0	Tt Field	2<X<10
J11/15-SS02-1-S	SS02	7/16/94	0	Tt Field	2<X<10
J11/15-SS03-1-S	SS03	7/16/94	0	Tt Field	2<X<10
J11/15-SS04-1-S	SS04	7/17/94	0	Tt Field	2
J11/15-SS05-1-S	SS05	7/17/94	0	Tt Field	2<X<10
J11/15-DP096	SS05	7/17/94	0	Tt Field	2
J11/15-SS06-1-S	SS06	7/16/94	0	Tt Field	2<X<10
J11/15-SS07-1-S	SS07	7/16/94	0	Tt Field	X<2
J11/15-SS08-1-S	SS08	7/17/94	0	Tt Field	2<X<10
J11/15-SS09-1-S	SS09	7/16/94	0	Tt Field	2<X<10
J11/15-DP085	SS09	7/16/94	0	Tt Field	2<X<10
J11/15-SS10-1-S	SS10	7/16/94	0	Tt Field	2<X<10
J11/15-SS11-1-S	SS11	7/16/94	0	Tt Field	2<X<10
J11/15-SS12-1-S	SS12	7/16/94	0	Tt Field	2<X<10
J11/15-SS13-1-S	SS13	7/16/94	0	Tt Field	2<X<10
J11/15-SS14-1-S	SS14	7/16/94	0	Tt Field	2<X<10
J11/15-SS15-1-S	SS15	7/17/94	0	Tt Field	2<X<10
J11/15-SS16-1-S	SS16	7/17/94	0	Tt Field	2<X<10
J11/15-SS17-1-S	SS17	7/17/94	0	Tt Field	2<X<10
J11/15-SS18-1-S	SS18	7/17/94	0	Tt Field	X<2
J11/15-SS19-1-S	SS19	7/17/94	0	Tt Field	2<X<10
J11/15-SS20-1-S	SS20	7/17/94	0	Tt Field	2<X<10
J11/15-SS21-1-S	SS21	7/17/94	0	Tt Field	2<X<10
<hr/>					
Analyses					23
Detections					2
Minimum Concentration					2
Maximum Concentration					2
<hr/>					
HWAD - PCG					NE
HWAD - PCG Hits					NE
<hr/>					

Notes:

NE = Not established.

Duplicate Samples:

J11/15-DP085 is a duplicate sample of J11/15-SS09-1-S.

J11/15-DP096 is a duplicate sample of J11/15-SS05-1-S.

**Metals**  
Method 6010 (BCA)

Sample ID	Location ID	Date	Depth (feet)	Lab	Aluminum		Arsenic	Barium	Cadmium	Selenium	Silver	Chromium	Lead
					mg/kg	mg/kg							
J11/15-SS01-1-S	SS01	7/16/94	0	BCA	NA	6.4 <sup>j</sup>	350	2.2	<5	<0.9	13	47 <sup>j</sup>	
J11/15-SS02-1-S	SS02	7/16/94	0	BCA	NA	6.4 <sup>j</sup>	74	0.57	<5	<0.9	2.7 <sup>j</sup>	7.9 <sup>j</sup>	
J11/15-SS03-1-S	SS03	7/16/94	0	BCA	NA	<4	110	1	<5	<0.9	5	19 <sup>j</sup>	
J11/15-SS04-1-S	SS04	7/17/94	0	BCA	NA	<4	270	<0.2	<5	<0.9	10	7.5 <sup>j</sup>	
J11/15-SS05-1-S	SS05	7/17/94	0	BCA	NA	<4	330	<0.2	<5	<0.9	11	23 <sup>j</sup>	
J11/15-DP092	SS05	7/17/94	0	BCA	NA	<4	330	3.2	9.6 <sup>j</sup>	<0.9	11	36 <sup>j</sup>	
J11/15-SS06-1-S	SS06	7/16/94	0	BCA	NA	4.3 <sup>j</sup>	130	1.1	<5	<0.9	5.8	15 <sup>j</sup>	
J11/15-SS07-1-S	SS07	7/16/94	0	BCA	NA	15 <sup>j</sup>	41	0.39 <sup>j</sup>	<5	<0.9	1.6 <sup>j</sup>	<5	
J11/15-SS08-1-S	SS08	7/17/94	0	BCA	NA	8.4 <sup>j</sup>	150	<0.2	<5	<1	6.7	14 <sup>j</sup>	
J11/15-SS09-1-S	SS09	7/16/94	0	BCA	NA	<4	180	1.9	6.1 <sup>j</sup>	<0.9	8.3	21 <sup>j</sup>	
J11/15-DP081	SS09	7/16/94	0	BCA	NA	<4	150	1.6	<5	<0.9	7.3	20 <sup>j</sup>	
J11/15-SS10-1-S	SS10	7/16/94	0	BCA	NA	5.8 <sup>j</sup>	250	2.1	10 <sup>j</sup>	<0.9	9.2	23 <sup>j</sup>	
J11/15-SS11-1-S	SS11	7/16/94	0	BCA	NA	<4	230	<0.2	<5	<0.9	9	14 <sup>j</sup>	
J11/15-SS12-1-S	SS12	7/16/94	0	BCA	NA	<4	320	<0.2	<5	<0.9	10	6.8 <sup>j</sup>	
J11/15-SS13-1-S	SS13	7/16/94	0	BCA	NA	<4	250	<0.2	<5	<0.9	7.8	<5	
J11/15-SS14-1-S	SS14	7/16/94	0	BCA	NA	13 <sup>j</sup>	250	<0.2	<5	<0.9	8.3	18 <sup>j</sup>	
J11/15-SS15-1-S	SS15	7/17/94	0	BCA	NA	<4	48	<0.2	<5	<0.9	7.2	7.8 <sup>j</sup>	
J11/15-SS16-1-S	SS16	7/17/94	0	BCA	NA	<4	500	<0.2	<5	<0.9	12	71	
J11/15-SS17-1-S	SS17	7/17/94	0	BCA	NA	7.9 <sup>j</sup>	120	<0.2	<5	<0.9	21	28 <sup>j</sup>	
J11/15-SS18-1-S	SS18	7/17/94	0	BCA	NA	<4	280	<0.2	<5	<0.9	6.2	<5	
J11/15-SS19-1-S	SS19	7/17/94	0	BCA	NA	<4	280	<0.2	<5	<0.9	6.9	7.2 <sup>j</sup>	
J11/15-SS20-1-S	SS20	7/17/94	0	BCA	NA	12 <sup>j</sup>	260	<0.2	<5	<0.9	7.1	17 <sup>j</sup>	
J11/15-SS21-1-S	SS21	7/17/94	0	BCA	NA	11 <sup>j</sup>	300	1.8	<5	<0.9	7.4	65	
<b>Analyses</b>					0	23	23	23	23	23	23	23	23
<b>Detections</b>					0	10	23	10	3	0	23	20	
<b>Minimum Concentration</b>					0	4.3	41	0.39	6.1	0	1.6	6.8	
<b>Maximum Concentration</b>					0	15	500	3.2	10	0	21	71	
<b>HWAD - PCG</b>					80000	100	2000	20	20	100	20	100	
<b>HWAD - PCG Hits</b>					0	0	0	0	0	0	1	0	

Notes:

NA = Not analyzed.

**Duplicate Samples:**

J11/15-DP081 is a duplicate sample of J11/15-SS09-1-S.

J11/15-DP092 is a duplicate sample of J11/15-SS05-1-S.

**Metals**  
Method 6010A (APCL)

Sample ID	Location ID	Sample Depth		Lab	Aluminum, Total mg/kg	Arsenic, Total mg/kg	Barium, Total mg/kg	Beryllium, Total mg/kg	Cadmium, Total mg/kg	Chromium, Total mg/kg	Lead, Total mg/kg	Nickel, Total mg/kg	Selenium, Total mg/kg	Silver, Total mg/kg
		Date	(feet)											
J11/15-TP01-1-S	TP01	3/1/97	5	APCL	12900	22.6	253	0.39	0.52	7.7	19.2	NA	<0.21	<0.079
J11/15-TP01-2-S	TP01	3/1/97	5	APCL	13200	27.8	277	0.44	0.64	8	21.6	NA	<0.21	<0.079
J11/15-TP01-3-S	TP01	3/1/97	1.5	APCL	3620	1.8	45	<0.017	<0.02	1.8	3.3	NA	<0.18	<0.07
J11/15-TP02-1-S	TP02	3/1/97	5	APCL	19100	12.7	384	0.43	0.17 <sup>j</sup>	11	28.6	NA	<0.21	<0.079
J11/15-TP02-2-S	TP02	3/1/97	1.5	APCL	7890	4.7	125	0.13 <sup>j</sup>	0.26	5.2	14.3	NA	<0.19	<0.073
J11/15-TP03-1-S	TP03	3/1/97	5	APCL	18200	15	110	0.55	0.15 <sup>j</sup>	10.2	30.5	NA	<0.2	<0.078
J11/15-TP03-2-S	TP03	3/1/97	2	APCL	11500	11.8	283	0.25	1.7	12.3	60.7	NA	<0.21	<0.08
J11/15-TP04-1-S	TP04	2/28/97	5	APCL	18200	17.4	368	0.36	0.51	12.7	40.2	NA	<0.2	<0.077
J11/15-TP04-2-S	TP04	2/28/97	2	APCL	12600	7.7	388	0.14 <sup>j</sup>	10.5	15	150	NA	<0.19	<0.071
J11/15-TP05-1-S	TP05	3/1/97	5	APCL	12500	14.3	271	0.31	0.66	7.6	21.5	NA	<0.2	<0.075
J11/15-TP05-2-S	TP05	3/1/97	5	APCL	10900	7.7	215	0.15 <sup>j</sup>	1.4	10.1	49.5	NA	<0.19	<0.072
J11/15-TP06-1-S	TP06	3/1/97	5	APCL	1690	11.7	36.5	<0.017	<0.02	1.2	1.6	NA	<0.18	<0.069
J11/15-TP06-2-S	TP06	3/1/97	5	APCL	1480	12.3	25	<0.017	<0.02	0.94	1.5	NA	<0.18	<0.069
J11/15-TP06-3-S	TP06	3/1/97	1.5	APCL	4500	11.9	89.4	<0.017	0.31	2.7	32.2	NA	<0.18	<0.07
J11/15-TP07-1-S	TP07	2/28/97	5	APCL	13900	18.7	452	4.5	14.9	58.4	1030	NA	<0.2	<0.075
J11/15-TP07-2-S	TP07	2/28/97	1.5	APCL	14300	10.4	346	0.31	37.1	41.9	1160	NA	<0.19	<0.071
J11/15-TP08-1-S	TP08	2/28/97	5	APCL	17600	13.1	317	0.48	0.26	10.2	33.3	NA	<0.2	<0.077
J11/15-TP08-2-S	TP08	2/28/97	2	APCL	19000	11.3	338	0.49	0.37	11.8	41.6	NA	<0.2	<0.076
J11/15-TR01-1-S	TR01	3/1/97	5	APCL	20100	13.1	392	0.61	0.13 <sup>j</sup>	11.7	31.1	NA	<0.21	<0.081
J11/15-TR01-2-S	TR01	3/1/97	10	APCL	15300	11.9	170	0.46	0.21 <sup>j</sup>	6.8	15.3	NA	<0.2	<0.075
J11/15-TR01-3-S	TR01	3/1/97	10	APCL	12900	10.6	148	0.28	0.16 <sup>j</sup>	6.2	12.8	NA	<0.2	<0.075
J11/15-TR01-4-S	TR01	3/1/97	5	APCL	18500	13.6	420	0.56	0.21 <sup>j</sup>	11.6	29.2	NA	<0.2	<0.078
J11/15-TR01-5-S	TR01	3/1/97	10	APCL	16400	33.8	211	0.51	0.35	9.2	18.2	NA	<0.2	<0.076
J11/15-TR02-1-S	TR02	3/1/97	5	APCL	16400	12.8	194	0.59	0.26	10.6	29.3	NA	<0.21	<0.082
J11/15-TR02-2-S	TR02	3/1/97	5	APCL	12000	12	226	0.34	0.16 <sup>j</sup>	6.9	17.6	NA	<0.2	<0.077
J11/15-TR03-1-S	TR03	3/1/97	5	APCL	18100	15.2	491	0.58	0.27	11.8	34.9	NA	<0.23	<0.089
J11/15-TR03-2-S	TR03	3/1/97	5	APCL	19100	14.3	494	0.6	0.38	12	36.8	NA	<0.23	<0.088
J11/15-TR03-3-S	TR03	3/1/97	5	APCL	12600	11.8	290	0.32	1.1	8	22.6	NA	<0.22	<0.085
J11/15-TR04-1-S	TR04	3/1/97	5	APCL	6330	18.4	126	0.12 <sup>j</sup>	0.19 <sup>j</sup>	3.5	8.3	NA	<0.2	<0.075
J11/15-TR04-2-S	TR04	3/1/97	5	APCL	4920	11.4	94.3	<0.018	0.11 <sup>j</sup>	2.7	6.6	NA	<0.19	<0.071
J11/15-TR05-1-S	TR05	2/28/97	5	APCL	15500	15	187	0.52	<0.022	8.8	24	NA	<0.2	<0.075
J11/15-TR05-2-S	TR05	2/28/97	5	APCL	19400	15.1	76.3	0.63	0.12 <sup>j</sup>	10.6	28.7	NA	<0.21	<0.079
J11/15-TR06-1-S	TR06	2/28/97	6	APCL	9010	13.4	158	0.16 <sup>j</sup>	0.13 <sup>j</sup>	5	12.5	NA	<0.19	<0.074
J11/15-TR06-2-S	TR06	2/28/97	5	APCL	16000	13.5	162	0.44	<0.023	9.3	22	NA	<0.21	<0.079
J11/15-TR07-1-S	TR07	3/1/97	5	APCL	17800	10.2	125 <sup>j</sup>	0.43 <sup>j</sup>	<0.023	10	25.1	NA	<0.21	<0.079
J11/15-TR07-2-S	TR07	3/1/97	5	APCL	18000	9.7	345 <sup>j</sup>	0.24 <sup>j</sup>	<0.023	9.5	22.8	NA	<0.21	<0.079
J11/15-TR07-3-S	TR07	3/1/97	5	APCL	19300	13.4	171	0.6	0.16 <sup>j</sup>	11.4	29.5	NA	<0.2	<0.078
<b>Analyses</b>					37	37	37	37	37	37	37	0	37	37
<b>Detections</b>					37	37	37	32	30	37	37	0	0	0
<b>Minimum Concentration</b>					1480	1.8	25	0.12	0.11	0.94	1.5	0	0	0
<b>Maximum Concentration</b>					20100	33.8	494	4.5	37.1	58.4	1160	0	0	0
<b>HWAD - PCG</b>					80000	100	2000	1	20	20	100	NE	20	100
<b>HWAD - PCG Hits</b>					0	0	0	1	1	2	3	NE	0	0

Notes:

NA = Not analyzed.

NE = Not established.

Duplicate Samples:

J11/15-TP01-2-S is a duplicate sample of J11/15-TP01-1-S.

J11/15-TP06-2-S is a duplicate sample of J11/15-TP06-1-S.

J11/15-TR01-2-S is a duplicate sample of J11/15-TR01-1-S.

J11/15-TR03-2-S is a duplicate sample of J11/15-TR03-1-S.

Mercury  
Method 7471 (BCA)

Sample ID	Location ID	Sample Date	Depth (feet)	Lab	Mercury mg/kg
J11/15-SS01-1-S	SS01	7/16/94	0	BCA	0.15
J11/15-SS02-1-S	SS02	7/16/94	0	BCA	<0.04
J11/15-SS03-1-S	SS03	7/16/94	0	BCA	<0.04
J11/15-SS04-1-S	SS04	7/17/94	0	BCA	0.044
J11/15-SS05-1-S	SS05	7/17/94	0	BCA	0.047
J11/15-DP092	SS05	7/17/94	0	BCA	<0.04
J11/15-SS06-1-S	SS06	7/16/94	0	BCA	0.051
J11/15-SS07-1-S	SS07	7/16/94	0	BCA	<0.04
J11/15-SS08-1-S	SS08	7/17/94	0	BCA	<0.05
J11/15-SS09-1-S	SS09	7/16/94	0	BCA	<0.04
J11/15-DP081	SS09	7/16/94	0	BCA	<0.04
J11/15-SS10-1-S	SS10	7/16/94	0	BCA	0.052
J11/15-SS11-1-S	SS11	7/16/94	0	BCA	0.049
J11/15-SS12-1-S	SS12	7/16/94	0	BCA	<0.04
J11/15-SS13-1-S	SS13	7/16/94	0	BCA	0.11
J11/15-SS14-1-S	SS14	7/16/94	0	BCA	<0.04
J11/15-SS15-1-S	SS15	7/17/94	0	BCA	<0.04
J11/15-SS16-1-S	SS16	7/17/94	0	BCA	0.38
J11/15-SS17-1-S	SS17	7/17/94	0	BCA	<0.04
J11/15-SS18-1-S	SS18	7/17/94	0	BCA	0.067
J11/15-SS19-1-S	SS19	7/17/94	0	BCA	0.058
J11/15-SS20-1-S	SS20	7/17/94	0	BCA	<0.04
J11/15-SS21-1-S	SS21	7/17/94	0	BCA	<0.04
<hr/>					
Analyses					23
Detections					10
Minimum Concentration					0.044
Maximum Concentration					0.38
<hr/>					
HWAD - PCG					24
HWAD - PCG Hits					0
<hr/>					

Duplicate Samples:

J11/15-DP081 is a duplicate sample of J11/15-SS09-1-S.

J11/15-DP092 is a duplicate sample of J11/15-SS05-1-S.

Mercury  
Method 7471A (APCL)

Sample ID	Location ID	Sample Date	Depth (feet)	Lab	Mercury, Total mg/kg
J11/15-TP01-1-S	TP01	3/1/97	5	APCL	<0.078
J11/15-TP01-2-S	TP01	3/1/97	5	APCL	<0.078
J11/15-TP01-3-S	TP01	3/1/97	1.5	APCL	<0.069
J11/15-TP02-1-S	TP02	3/1/97	5	APCL	<0.078
J11/15-TP02-2-S	TP02	3/1/97	1.5	APCL	<0.072
J11/15-TP03-1-S	TP03	3/1/97	5	APCL	<0.077
J11/15-TP03-2-S	TP03	3/1/97	2	APCL	<0.079
J11/15-TP04-1-S	TP04	2/28/97	5	APCL	<0.076
J11/15-TP04-2-S	TP04	2/28/97	2	APCL	<0.07
J11/15-TP05-1-S	TP05	3/1/97	5	APCL	<0.074
J11/15-TP05-2-S	TP05	3/1/97	5	APCL	<0.071
J11/15-TP06-1-S	TP06	3/1/97	5	APCL	<0.068
J11/15-TP06-2-S	TP06	3/1/97	5	APCL	<0.068
J11/15-TP06-3-S	TP06	3/1/97	1.5	APCL	<0.069
J11/15-TP07-1-S	TP07	2/28/97	5	APCL	<0.074
J11/15-TP07-2-S	TP07	2/28/97	1.5	APCL	<0.07
J11/15-TP08-1-S	TP08	2/28/97	5	APCL	<0.076
J11/15-TP08-2-S	TP08	2/28/97	2	APCL	<0.075
J11/15-TR01-1-S	TR01	3/1/97	5	APCL	<0.079
J11/15-TR01-2-S	TR01	3/1/97	10	APCL	<0.074
J11/15-TR01-3-S	TR01	3/1/97	10	APCL	<0.074
J11/15-TR01-4-S	TR01	3/1/97	5	APCL	<0.077
J11/15-TR01-5-S	TR01	3/1/97	10	APCL	<0.075
J11/15-TR02-1-S	TR02	3/1/97	5	APCL	<0.081
J11/15-TR02-2-S	TR02	3/1/97	5	APCL	<0.076
J11/15-TR03-1-S	TR03	3/1/97	5	APCL	<0.088
J11/15-TR03-2-S	TR03	3/1/97	5	APCL	<0.087
J11/15-TR03-3-S	TR03	3/1/97	5	APCL	<0.084
J11/15-TR04-1-S	TR04	3/1/97	5	APCL	<0.074
J11/15-TR04-2-S	TR04	3/1/97	5	APCL	<0.07
J11/15-TR05-1-S	TR05	2/28/97	5	APCL	<0.074
J11/15-TR05-2-S	TR05	2/28/97	5	APCL	<0.078
J11/15-TR06-1-S	TR06	2/28/97	6	APCL	<0.073
J11/15-TR06-2-S	TR06	2/28/97	5	APCL	<0.078
J11/15-TR07-1-S	TR07	3/1/97	5	APCL	<0.078
J11/15-TR07-2-S	TR07	3/1/97	5	APCL	<0.078
J11/15-TR07-3-S	TR07	3/1/97	5	APCL	<0.077
<hr/>					
Analyses					37
Detections					0
Minimum Concentration					0
Maximum Concentration					0
<hr/>					
HWAD - PCG					24
HWAD - PCG Hits					0
<hr/>					

Duplicate Samples:

J11/15-TP01-2-S is a duplicate sample of J11/15-TP01-1-S.

J11/15-TP06-2-S is a duplicate sample of J11/15-TP06-1-S.

J11/15-TR01-2-S is a duplicate sample of J11/15-TR01-1-S.

J11/15-TR03-2-S is a duplicate sample of J11/15-TR03-1-S.

TPH  
Method 8015M (BCA Field)

Sample ID	Location ID	Sample Date	Depth (feet)	Lab	TPH (as diesel)
					mg/kg
J11/15-SS01-1-S	SS01	7/16/94	0	BCA Field	<0.2
J11/15-SS02-1-S	SS02	7/16/94	0	BCA Field	<0.2
J11/15-SS03-1-S	SS03	7/16/94	0	BCA Field	<0.2
J11/15-SS04-1-S	SS04	7/17/94	0	BCA Field	<0.2
J11/15-SS05-1-S	SS05	7/17/94	0	BCA Field	<0.2
J11/15-DP093	SS05	7/17/94	0	BCA Field	<0.2
J11/15-SS06-1-S	SS06	7/16/94	0	BCA Field	<0.2
J11/15-SS07-1-S	SS07	7/16/94	0	BCA Field	<0.2
J11/15-SS08-1-S	SS08	7/17/94	0	BCA Field	<0.2
J11/15-SS09-1-S	SS09	7/16/94	0	BCA Field	<0.2
J11/15-DP082	SS09	7/16/94	0	BCA Field	<0.2
J11/15-SS10-1-S	SS10	7/16/94	0	BCA Field	<0.2
J11/15-SS11-1-S	SS11	7/16/94	0	BCA Field	<0.2
J11/15-SS12-1-S	SS12	7/16/94	0	BCA Field	<0.2
J11/15-SS13-1-S	SS13	7/16/94	0	BCA Field	<0.2
J11/15-SS14-1-S	SS14	7/16/94	0	BCA Field	<0.2
J11/15-SS15-1-S	SS15	7/17/94	0	BCA Field	<0.2
J11/15-SS16-1-S	SS16	7/17/94	0	BCA Field	<0.2
J11/15-SS17-1-S	SS17	7/17/94	0	BCA Field	<0.2
J11/15-SS18-1-S	SS18	7/17/94	0	BCA Field	<0.2
J11/15-SS19-1-S	SS19	7/17/94	0	BCA Field	<0.2
J11/15-SS20-1-S	SS20	7/17/94	0	BCA Field	<0.2
J11/15-SS21-1-S	SS21	7/17/94	0	BCA Field	<0.2
<hr/>					
Analyses					23
Detections					0
Minimum Concentration					0
Maximum Concentration					0
<hr/>					
HWAD - PCG					100
HWAD - PCG Hits					0
<hr/>					

Duplicate Samples:

J11/15-DP082 is a duplicate sample of J11/15-SS09-1-S.  
J11/15-DP093 is a duplicate sample of J11/15-SS05-1-S.

OC Pesticides and PCBs  
Method 8080 (BCA)

Sample ID	Location ID	Depth (feet)	Lab	mg/kg				mg/kg				Total PCBs mg/kg
				SS09	7/16/94	0	BCA	<0.03	<0.03	<0.02	<0.03	
J11/15-DP084	SS09	7/16/94	0	BCA	<0.03	<0.03	<0.02	<0.03	<0.02	<0.02	<0.007	NA
J11/15-DP095	SS05	7/17/94	0	BCA	<0.03	<0.03	<0.02	<0.03	<0.02	<0.02	<0.007	NA
<b>Analyses</b>				2	2	2	2	2	2	2	2	0
<b>Detections</b>				0	0	0	0	0	0	0	0	0
<b>Minimum Concentration</b>				0	0	0	0	0	0	0	0	0
<b>Maximum Concentration</b>				0	0	0	0	0	0	0	0	0
<b>HWAD - PCG</b>				25	25	25	25	25	25	25	25	NE
<b>HWAD - PCG Hits</b>				0	0	0	0	0	0	0	0	NE

Notes:

NA = Not analyzed.

NE = Not established.

Duplicate Samples:

J11/15-DP084 is a duplicate sample of J11/15-SS09-1-S.

J11/15-DP095 is a duplicate sample of J11/15-SS05-1-S.

Explosives  
Method 8090M (BCA Field)

Explosives  
Method 8090M (BCA Field)

Sample ID	Location ID	Depth (feet)	Lab	1,3,5-Tnitrobenzene	1,3-Dinitrobenzene	2,3-Dinitrotoluene	2,4,6-Tnitrotoluene	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Nitrotoluene	3-Nitrotoluene	4-Nitrotoluene	Nitrobenzene	RDX	Tetryl	
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Minimum Concentration				0	0	0	0	0	0	0	0	0	0	0	0	0
Maximum Concentration				0	0	0	0	0	0	0	0	0	0	0	0	0
HWAD - PCG				4	8	NE	233	2.6	80	800	800	800	40	64	800	
HWAD - PCG Hits				0	0	NE	0	0	0	0	0	0	0	0	0	0

Notes:

NA = Not analyzed.  
NE = Not established.

Duplicate Samples:

J1115-DP082 is a duplicate sample of J1115-SS09-1-S.  
J1115-DP093 is a duplicate sample of J1115-SS05-1-S.



VOCs  
Method 8260A (APCL)

Sample ID	Location ID	Depth (feet)	Lab	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
J111/5-TR05-2-S	TR05	2/28/97	5	APCL <0.0001	<0.0002	<0.0001	<0.0002	<0.0001	<0.0001
J111/5-TR06-1-S	TR06	2/28/97	6	APCL <0.0001	<0.0002	<0.0001	<0.0002	<0.0001	<0.0005
J111/5-TR06-2-S	TR06	2/28/97	5	APCL <0.0001	<0.0002	<0.0001	<0.0002	<0.0001	<0.0006
J111/5-TR07-1-S	TR07	3/1/97	5	APCL <0.0001	<0.0002	<0.0001	<0.0002	<0.0001	<0.0001
J111/5-TR07-2-S	TR07	3/1/97	5	APCL <0.0001	<0.0002	<0.0001	<0.0002	<0.0001	<0.0006
J111/5-TR07-3-S	TR07	3/1/97	5	APCL <0.0001	<0.0002	<0.0001	<0.0002	<0.0001	<0.0006
Analyses									
Detections									
Minimum Concentration									
Maximum Concentration									
HWAD - PCG	NE	7200	35	NE	NE	NE	NE	480	NE
HWAD - PCG H	NE	0	0	NE	NE	NE	NE	0	NE

**Notes:**

**Duplicate Samples:**  
J11/15-TP01-2-S is a duplicate sample of J11/15-TP01-1-S.  
J11/15-TP02-2-S is a duplicate sample of J11/15-TP02-1-S.  
J11/15-TR01-2-S is a duplicate sample of J11/15-TR01-1-S.  
J11/15-TR03-2-S is a duplicate sample of J11/15-TR03-1-S.

VOCS  
Method 8260A (APCI)

Sample ID	Location ID	Date	Depth (feet) ft	mg/kg	Benzene	
					mg/kg	mg/kg
J11/15-TP01-1-S	TP01	3/1/97	5	APCL <0.0001	<0.0002	<0.0001
J11/15-TP01-2-S	TP01	3/1/97	5	APCL <0.0001	<0.0002	<0.0002
J11/15-TP01-3-S	TP01	3/1/97	1.5	APCL <0.0001	<0.0002	<0.0002
J11/15-TP02-1-S	TP02	3/1/97	5	APCL <0.0001	<0.0002	<0.0002
J11/15-TP02-2-S	TP02	3/1/97	1.5	APCL <0.0001	<0.0002	<0.0002
J11/15-TP03-1-S	TP03	3/1/97	5	APCL <0.0001	<0.0002	<0.0002
J11/15-TP03-2-S	TP03	3/1/97	2	APCL <0.0001	<0.0002	<0.0002
J11/15-TP04-1-S	TP04	2/28/97	5	APCL <0.0001	<0.0002	<0.0002
J11/15-TP04-2-S	TP04	2/28/97	2	APCL <0.0001	<0.0002	<0.0002
J11/15-TP05-1-S	TP05	3/1/97	5	APCL <0.0001	<0.0002	<0.0002
J11/15-TP05-2-S	TP05	3/1/97	5	APCL <0.0001	<0.0002	<0.0002
J11/15-TP06-1-S	TP06	3/1/97	5	APCL <0.0001	<0.0002	<0.0002
J11/15-TP06-2-S	TP06	3/1/97	5	APCL <0.0001	<0.0002	<0.0002
J11/15-TP06-3-S	TP06	3/1/97	1.5	APCL <0.0001	<0.0002	<0.0002
J11/15-TP07-1-S	TP07	2/28/97	5	APCL <0.0001	<0.0002	<0.0002
J11/15-TP07-2-S	TP07	2/28/97	1.5	APCL <0.0001	<0.0002	<0.0002
J11/15-TP08-1-S	TP08	2/28/97	5	APCL <0.0001	<0.0002	<0.0002
J11/15-TP08-2-S	TP08	2/28/97	2	APCL <0.0001	<0.0002	<0.0002
J11/15-TR01-1-S	TR01	3/1/97	5	APCL <0.0001	<0.0002	<0.0002
J11/15-TR01-2-S	TR01	3/1/97	10	APCL <0.0001	<0.0002	<0.0002
J11/15-TR01-3-S	TR01	3/1/97	10	APCL <0.0001	<0.0002	<0.0002
J11/15-TR01-4-S	TR01	3/1/97	5	APCL <0.0001	<0.0002	<0.0002
J11/15-TR01-5-S	TR01	3/1/97	10	APCL <0.0001	<0.0002	<0.0002
J11/15-TR02-1-S	TR02	3/1/97	5	APCL <0.0001	<0.0002	<0.0002
J11/15-TR02-2-S	TR02	3/1/97	5	APCL <0.0001	<0.0002	<0.0002
J11/15-TR03-1-S	TR03	3/1/97	5	APCL <0.0001	<0.0003	<0.0003
J11/15-TR03-2-S	TR03	3/1/97	5	APCL <0.0001	<0.0003	<0.0003
J11/15-TR03-3-S	TR03	3/1/97	5	APCL <0.0001	<0.0003	<0.0003
J11/15-TR04-1-S	TR04	3/1/97	5	APCL <0.0001	<0.0002	<0.0002
J11/15-TR04-2-S	TR04	3/1/97	5	APCL <0.0001	<0.0002	<0.0002
J11/15-TR05-1-S	TR05	2/28/97	5	APCL <0.0001	<0.0002	<0.0002

VOCS  
Method 8260A (APCL)

Sample ID	Location ID	Date	Depth (feet)	Lab			Benzene mg/kg
					APCL	mg/kg	
J11/15-TR05-2-S	TR05	2/28/97	5	APCL	<0.0001	<0.0002	<0.0001 <0.0002
J11/15-TR06-1-S	TR06	2/28/97	6	APCL	<0.0001	<0.0002	<0.0001 <0.0002
J11/15-TR06-2-S	TR06	2/28/97	5	APCL	<0.0001	<0.0002	<0.0001 <0.0002
J11/15-TR07-1-S	TR07	3/1/97	5	APCL	<0.0001	<0.0002	<0.0001 <0.0002
J11/15-TR07-2-S	TR07	3/1/97	5	APCL	<0.0001	<0.0002	<0.0001 <0.0002
J11/15-TR07-3-S	TR07	3/1/97	5	APCL	<0.0001	<0.0002	<0.0001 <0.0002
Analyses			37	37	37	37	37
Detections			0	0	0	0	0
Minimum Concentration			0	0	0	0	0
Maximum Concentration			0	0	0	0	0
HWAD - PCG			7200	NE	NE	150	NE
HWAD - PCG Hits			0	NE	NE	0	NE

Notes:  
NE = Not established.

Duplicate Samples:

J11/15-TP01-2-S is a duplicate sample of J11/15-TP01-1-S.  
J11/15-TP06-2-S is a duplicate sample of J11/15-TP06-1-S.  
J11/15-TR01-2-S is a duplicate sample of J11/15-TR01-1-S.  
J11/15-TR03-2-S is a duplicate sample of J11/15-TR03-1-S.

VOCS  
Method 8260A (APCL)

Sample ID	Location	Sample ID	Depth (feet)	$\delta_2$	mg/kg							
						Bromobenzene	Bromochloromethane	Bromoform	Carbon tetrachloride	Chlorobenzene	Chloroform	Chloroethylene
J11/15-TP01-1-S	TP01	3/1/97	5	APCL	<0.0001	<0.0006	<0.0002	<0.0003	<0.0001	<0.0008	<0.0002	<0.0001
J11/15-TP01-2-S	TP01	3/1/97	5	APCL	<0.0001	<0.0006	<0.0002	<0.0003	<0.0001	<0.0008	<0.0002	<0.0001
J11/15-TP01-3-S	TP01	3/1/97	1.5	APCL	<0.0001	<0.0005	<0.0002	<0.0003	<0.0001	<0.0007	<0.0002	<0.0001
J11/15-TP02-1-S	TP02	3/1/97	5	APCL	<0.0001	<0.0006	<0.0002	<0.0003	<0.0001	<0.0008	<0.0002	<0.0001
J11/15-TP02-2-S	TP02	3/1/97	1.5	APCL	<0.0001	<0.0005	<0.0002	<0.0003	<0.0001	<0.0007	<0.0002	<0.0001
J11/15-TP03-1-S	TP03	3/1/97	5	APCL	<0.0001	<0.0006	<0.0002	<0.0003	<0.0001	<0.0008	<0.0002	<0.0001
J11/15-TP03-2-S	TP03	3/1/97	2	APCL	<0.0001	<0.0006	<0.0002	<0.0003	<0.0001	<0.0008	<0.0002	<0.0001
J11/15-TP04-1-S	TP04	2/28/97	5	APCL	<0.0001	<0.0006	<0.0002	<0.0003	<0.0001	<0.0008	<0.0002	<0.0001
J11/15-TP04-2-S	TP04	2/28/97	2	APCL	<0.0001	<0.0005	<0.0002	<0.0003	<0.0001	<0.0007	<0.0002	<0.0001
J11/15-TP05-1-S	TP05	3/1/97	5	APCL	<0.0001	<0.0005	<0.0002	<0.0003	<0.0001	<0.0008	<0.0002	<0.0001
J11/15-TP05-2-S	TP05	3/1/97	5	APCL	<0.0001	<0.0005	<0.0002	<0.0003	<0.0001	<0.0007	<0.0002	<0.0001
J11/15-TP06-1-S	TP06	3/1/97	5	APCL	<0.0001	<0.0005	<0.0002	<0.0003	<0.0001	<0.0008	<0.0002	<0.0001
J11/15-TP06-2-S	TP06	3/1/97	5	APCL	<0.0001	<0.0005	<0.0002	<0.0003	<0.0001	<0.0008	<0.0002	<0.0001
J11/15-TP06-3-S	TP06	3/1/97	1.5	APCL	<0.0001	<0.0005	<0.0002	<0.0003	<0.0001	<0.0008	<0.0002	<0.0001
J11/15-TP07-1-S	TP07	2/28/97	5	APCL	<0.0001	<0.0005	<0.0002	<0.0003	<0.0001	<0.0008	<0.0002	<0.0001
J11/15-TP07-2-S	TP07	2/28/97	1.5	APCL	<0.0001	<0.0005	<0.0002	<0.0003	<0.0001	<0.0007	<0.0002	<0.0001
J11/15-TP08-1-S	TP08	2/28/97	5	APCL	<0.0001	<0.0006	<0.0002	<0.0003	<0.0001	<0.0008	<0.0002	<0.0001
J11/15-TP08-2-S	TP08	2/28/97	2	APCL	<0.0001	<0.0006	<0.0002	<0.0003	<0.0001	<0.0008	<0.0002	<0.0001
J11/15-TR01-1-S	TR01	3/1/97	5	APCL	<0.0001	<0.0006	<0.0002	<0.0004	<0.0001	<0.0008	<0.0002	<0.0001
J11/15-TR01-2-S	TR01	3/1/97	10	APCL	<0.0001	<0.0005	<0.0002	<0.0003	<0.0001	<0.0008	<0.0002	<0.0001
J11/15-TR01-3-S	TR01	3/1/97	10	APCL	<0.0001	<0.0005	<0.0002	<0.0003	<0.0001	<0.0008	<0.0002	<0.0001
J11/15-TR01-4-S	TR01	3/1/97	5	APCL	<0.0001	<0.0006	<0.0002	<0.0003	<0.0001	<0.0008	<0.0002	<0.0001
J11/15-TR01-5-S	TR01	3/1/97	10	APCL	<0.0001	<0.0006	<0.0002	<0.0003	<0.0001	<0.0008	<0.0002	<0.0001
J11/15-TR02-1-S	TR02	3/1/97	5	APCL	<0.0001	<0.0006	<0.0002	<0.0004	<0.0001	<0.0008	<0.0002	<0.0001
J11/15-TR02-2-S	TR02	3/1/97	5	APCL	<0.0001	<0.0006	<0.0002	<0.0003	<0.0001	<0.0008	<0.0002	<0.0001
J11/15-TR03-1-S	TR03	3/1/97	5	APCL	<0.0001	<0.0006	<0.0002	<0.0004	<0.0001	<0.0008	<0.0003	<0.0001
J11/15-TR03-2-S	TR03	3/1/97	5	APCL	<0.0001	<0.0006	<0.0002	<0.0004	<0.0001	<0.0008	<0.0003	<0.0001
J11/15-TR03-3-S	TR03	3/1/97	5	APCL	<0.0001	<0.0006	<0.0002	<0.0004	<0.0001	<0.0009	<0.0004	<0.0001
J11/15-TR04-1-S	TR04	3/1/97	5	APCL	<0.0001	<0.0005	<0.0002	<0.0003	<0.0001	<0.0008	<0.0002	<0.0001
J11/15-TR04-2-S	TR04	3/1/97	5	APCL	<0.0001	<0.0005	<0.0002	<0.0003	<0.0001	<0.0007	<0.0002	<0.0001
J11/15-TR05-1-S	TR05	2/28/97	5	APCL	<0.0001	<0.0005	<0.0002	<0.0003	<0.0001	<0.0008	<0.0002	<0.0001

**VOCS**  
Method 8260A (APCL)

Sample ID	Location ID	Depth (feet)	Lab	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Chloroethane	Chloroform	Chloroethylene	Chloromethane	Cis-1,2-Dichloroethene	Cis-1,3-Dichloropropene
J11/15-TR05-2-S	TR05	2/28/97	5	APCL <0.0001	<0.0006	<0.0002	<0.0003	<0.0001	<0.0002	<0.0008	<0.0002	<0.0003	<0.0002
J11/15-TR06-1-S	TR06	2/28/97	6	APCL <0.0001	<0.0005	<0.0002	<0.0003	<0.0001	<0.0002	<0.0008	<0.0002	<0.0003	<0.0002
J11/15-TR06-2-S	TR06	2/28/97	5	APCL <0.0001	<0.0006	<0.0002	<0.0003	<0.0001	<0.0002	<0.0008	<0.0002	<0.0003	<0.0002
J11/15-TR07-1-S	TR07	3/1/97	5	APCL <0.0001	<0.0006	<0.0002	<0.0003	<0.0001	<0.0002	<0.0008	<0.0002	<0.0003	<0.0002
J11/15-TR07-2-S	TR07	3/1/97	5	APCL <0.0001	<0.0006	<0.0002	<0.0003	<0.0001	<0.0002	<0.0008	<0.0002	<0.0003	<0.0002
J11/15-TR07-3-S	TR07	3/1/97	5	APCL <0.0001	<0.0006	<0.0002	<0.0003	<0.0001	<0.0002	<0.0008	<0.0002	<0.0003	<0.0002
Analyses				37	37	37	37	37	37	37	37	37	37
Detections				0	0	0	0	0	0	0	0	0	0
Minimum Concentration				0	0	0	0	0	0	0	0	0	0
Maximum Concentration				0	0	0	0	0	0	0	0	0	0
HWAD - PCG				NE	NE	89	112	10	2000	NE	120	538	NE
HWAD - PCG Hits				NE	NE	0	0	0	0	NE	0	0	NE

Notes:  
NE = Not established.

Duplicate Samples:

J11/15-TP01-2-S is a duplicate sample of J11/15-TP01-1-S.

J11/15-TP06-2-S is a duplicate sample of J11/15-TP06-1-S.

J11/15-TR01-2-S is a duplicate sample of J11/15-TR01-1-S.

J11/15-TR03-2-S is a duplicate sample of J11/15-TR03-1-S.

VOCS  
Method 8260A (APCL)

Sample ID	Location	Sample Date (feet)	Lab	Dibromochloropropane	Dibromoethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	m- $\alpha$ -Xylenes	MTE	n-Butylbenzene	n-Propylibenzene	
J11/15-TP01-1-S	TP01	3/1/97	5	APCL <0.0002	<0.001	<0.0006	<0.0002	<0.0002	<0.0006	<0.0008	<0.0002	<0.0002	<0.0001
J11/15-TP01-2-S	TP01	3/1/97	5	APCL <0.0002	<0.001	<0.0006	<0.0002	<0.0001	<0.0006	<0.0008	<0.0002	<0.0001	<0.0001
J11/15-TP01-3-S	TP01	3/1/97	1.5	APCL <0.0002	<0.0008	<0.0005	<0.0002	<0.0001	<0.0005	<0.0007	<0.0002	<0.0001	<0.0001
J11/15-TP02-1-S	TP02	3/1/97	5	APCL <0.0002	<0.001	<0.0006	<0.0002	<0.0001	<0.0006	<0.0008	<0.0002	<0.0002	<0.0001
J11/15-TP02-2-S	TP02	3/1/97	1.5	APCL <0.0002	<0.0009	<0.0005	<0.0002	<0.0001	<0.0006	<0.0005	<0.0007	<0.0002	<0.0001
J11/15-TP03-1-S	TP03	3/1/97	5	APCL <0.0002	<0.001	<0.0006	<0.0002	<0.0001	<0.0006	<0.0008	<0.0002	<0.0002	<0.0001
J11/15-TP03-2-S	TP03	3/1/97	2	APCL <0.0002	<0.001	<0.0006	<0.0002	<0.0001	<0.0006	<0.0008	<0.0002	<0.0002	<0.0001
J11/15-TP04-1-S	TP04	2/28/97	5	APCL <0.0002	<0.001	<0.0006	<0.0002	<0.0001	<0.0006	<0.0008	<0.0002	<0.0002	<0.0001
J11/15-TP04-2-S	TP04	2/28/97	2	APCL <0.0002	<0.0009	<0.0005	<0.0002	<0.0001	<0.0006	<0.0008	<0.0002	<0.0002	<0.0001
J11/15-TP05-1-S	TP05	3/1/97	5	APCL <0.0002	<0.001	<0.0005	<0.0002	<0.0001	<0.0006	<0.0008	<0.0002	<0.0002	<0.0001
J11/15-TP05-2-S	TP05	3/1/97	5	APCL <0.0002	<0.0009	<0.0005	<0.0002	<0.0001	<0.0006	<0.0008	<0.0002	<0.0002	<0.0001
J11/15-TP06-1-S	TP06	3/1/97	5	APCL <0.0002	<0.0009	<0.0005	<0.0002	<0.0001	<0.0006	<0.0008	<0.0002	<0.0002	<0.0001
J11/15-TP06-2-S	TP06	3/1/97	5	APCL <0.0002	<0.0009	<0.0005	<0.0002	<0.0001	<0.0006	<0.0008	<0.0002	<0.0002	<0.0001
J11/15-TP06-3-S	TP06	3/1/97	1.5	APCL <0.0002	<0.0009	<0.0005	<0.0002	<0.0001	<0.0006	<0.0008	<0.0002	<0.0002	<0.0001
J11/15-TP07-1-S	TP07	2/28/97	5	APCL <0.0002	<0.001	<0.0005	<0.0002	<0.0001	<0.0006	<0.0008	<0.0002	<0.0002	<0.0001
J11/15-TP07-2-S	TP07	2/28/97	1.5	APCL <0.0002	<0.0009	<0.0005	<0.0002	<0.0001	<0.0006	<0.0008	<0.0002	<0.0002	<0.0001
J11/15-TP08-1-S	TP08	2/28/97	5	APCL <0.0002	<0.001	<0.0006	<0.0002	<0.0001	<0.0006	<0.0008	<0.0002	<0.0002	<0.0001
J11/15-TP08-2-S	TP08	2/28/97	2	APCL <0.0002	<0.001	<0.0006	<0.0002	<0.0001	<0.0006	<0.0008	<0.0002	<0.0002	<0.0001
J11/15-TR01-1-S	TR01	3/1/97	5	APCL <0.0002	<0.001	<0.0006	<0.0002	<0.0001	<0.0006	<0.0008	<0.0002	<0.0002	<0.0001
J11/15-TR01-2-S	TR01	3/1/97	10	APCL <0.0002	<0.001	<0.0005	<0.0002	<0.0001	<0.0006	<0.0008	<0.0002	<0.0002	<0.0001
J11/15-TR01-3-S	TR01	3/1/97	10	APCL <0.0002	<0.001	<0.0005	<0.0002	<0.0001	<0.0006	<0.0008	<0.0002	<0.0002	<0.0001
J11/15-TR01-4-S	TR01	3/1/97	5	APCL <0.0003	<0.001	<0.0006	<0.0002	<0.0001	<0.0006	<0.0008	<0.0002	<0.0002	<0.0001
J11/15-TR01-5-S	TR01	3/1/97	10	APCL <0.0002	<0.001	<0.0005	<0.0002	<0.0001	<0.0006	<0.0008	<0.0002	<0.0002	<0.0001
J11/15-TR02-1-S	TR02	3/1/97	5	APCL <0.0002	<0.001	<0.0006	<0.0002	<0.0001	<0.0006	<0.0008	<0.0002	<0.0002	<0.0001
J11/15-TR02-2-S	TR02	3/1/97	5	APCL <0.0002	<0.001	<0.0006	<0.0002	<0.0001	<0.0006	<0.0008	<0.0002	<0.0002	<0.0001
J11/15-TR03-1-S	TR03	3/1/97	5	APCL <0.0003	<0.001	<0.0006	<0.0003	<0.0001	<0.0006	<0.0008	<0.0003	<0.0003	<0.0001
J11/15-TR03-2-S	TR03	3/1/97	5	APCL <0.0003	<0.001	<0.0006	<0.0003	<0.0001	<0.0006	<0.0008	<0.0003	<0.0003	<0.0001
J11/15-TR03-3-S	TR03	3/1/97	5	APCL <0.0002	<0.001	<0.0006	<0.0002	<0.0001	<0.0006	<0.0008	<0.0002	<0.0002	<0.0001
J11/15-TR04-1-S	TR04	3/1/97	5	APCL <0.0002	<0.001	<0.0005	<0.0002	<0.0001	<0.0005	<0.0008	<0.0002	<0.0002	<0.0001
J11/15-TR04-2-S	TR04	3/1/97	5	APCL <0.0002	<0.0009	<0.0005	<0.0002	<0.0001	<0.0005	<0.0007	<0.0002	<0.0002	<0.0001
J11/15-TR05-1-S	TR05	2/28/97	5	APCL <0.0002	<0.001	<0.0005	<0.0002	<0.0001	<0.0005	<0.0008	<0.0002	<0.0002	<0.0001

VOCs  
Method 8260A (APCL)

Sample ID	Location ID	Date (feet)	Lab	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
J11/15-TR05-2-S	TR05	2/28/97	5 APCL	<0.0002	<0.001 w	<0.0006	<0.0002	<0.0002	<0.0006	<0.0008	<0.0002
J11/15-TR06-1-S	TR06	2/28/97	6 APCL	<0.0002	<0.001 w	<0.0005	<0.0002	<0.0002	<0.0005	<0.0008	<0.0002
J11/15-TR06-2-S	TR06	2/28/97	5 APCL	<0.0002	<0.001 w	<0.0006	<0.0002	<0.0002	<0.0006	<0.0008	<0.0002
J11/15-TR07-1-S	TR07	3/1/97	5 APCL	<0.0002	<0.001 w	<0.0006	<0.0002	<0.0002	<0.0006	<0.0008	<0.0002
J11/15-TR07-2-S	TR07	3/1/97	5 APCL	<0.0002	<0.001 w	<0.0006	<0.0002	<0.0002	<0.0006	<0.0008	<0.0002
J11/15-TR07-3-S	TR07	3/1/97	5 APCL	<0.0002	<0.001 w	<0.0006	<0.0002	<0.0002	<0.0006	<0.0008	<0.0002
Analyses	37	37		37	37	37	37	37	37	37	37
Detections	0	0		0	0	0	0	0	0	0	0
Minimum Concentration	0	0		0	0	0	0	0	0	0	0
Maximum Concentration	0	0		0	0	0	0	0	0	0	0
HWAD - PCG	83	NE	800	16000	8000	NE	NE	160000	4800	NE	NE
HWAD - PCG Hits	0	NE	0	0	0	NE	NE	0	0	NE	NE

Notes:  
NE = Not established.

Duplicate Samples:  
J11/15-TP01-2-S is a duplicate sample of J11/15-TP01-1-S.  
J11/15-TP06-2-S is a duplicate sample of J11/15-TP06-1-S.  
J11/15-TR01-2-S is a duplicate sample of J11/15-TR01-1-S.  
J11/15-TR03-2-S is a duplicate sample of J11/15-TR03-1-S.

VOCs  
Method 8260A (APCL)

Sample ID	Location ID	Date (feet)	ppb	Z-naphthalene	O-Xylene	sec-Butylbenzene	Tetrachloroethylene	Toluene	trans-1,2-Dichloroethylene	trans-1,3-Dichloropropene	Trichloroethylene	Vinyl chloride
J11/15-TP01-1-S	TP01	3/1/97	5	APCL <0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0002	<0.0002	<0.0005	<0.0002
J11/15-TP01-2-S	TP01	3/1/97	5	APCL <0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0002	<0.0002	<0.0005	<0.0002
J11/15-TP01-3-S	TP01	3/1/97	1.5	APCL <0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0002	<0.0002	<0.0004	<0.0002
J11/15-TP02-1-S	TP02	3/1/97	5	APCL <0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0002	<0.0002	<0.0005	<0.0002
J11/15-TP02-2-S	TP02	3/1/97	1.5	APCL <0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0002	<0.0002	<0.0004	<0.0002
J11/15-TP03-1-S	TP03	3/1/97	5	APCL <0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0002	<0.0002	<0.0005	<0.0002
J11/15-TP03-2-S	TP03	3/1/97	2	APCL <0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0002	<0.0002	<0.0005	<0.0002
J11/15-TP04-1-S	TP04	2/28/97	5	APCL <0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0002	<0.0002	<0.0004	<0.0002
J11/15-TP04-2-S	TP04	2/28/97	2	APCL <0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0002	<0.0002	<0.0004	<0.0002
J11/15-TP05-1-S	TP05	3/1/97	5	APCL <0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0002	<0.0002	<0.0004	<0.0002
J11/15-TP05-2-S	TP05	3/1/97	5	APCL <0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0002	<0.0002	<0.0004	<0.0002
J11/15-TP06-1-S	TP06	3/1/97	5	APCL <0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0002	<0.0002	<0.0004	<0.0002
J11/15-TP06-2-S	TP06	3/1/97	5	APCL <0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0002	<0.0002	<0.0004	<0.0002
J11/15-TP06-3-S	TP06	3/1/97	1.5	APCL <0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0002	<0.0002	<0.0004	<0.0002
J11/15-TP07-1-S	TP07	2/28/97	5	APCL <0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0002	<0.0002	<0.0004	<0.0002
J11/15-TP07-2-S	TP07	2/28/97	1.5	APCL <0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0002	<0.0002	<0.0004	<0.0002
J11/15-TP08-1-S	TP08	2/28/97	5	APCL <0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0002	<0.0002	<0.0004	<0.0002
J11/15-TP08-2-S	TP08	2/28/97	2	APCL <0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0002	<0.0002	<0.0004	<0.0002
J11/15-TR01-1-S	TR01	3/1/97	5	APCL <0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0002	<0.0002	<0.0005	<0.0002
J11/15-TR01-2-S	TR01	3/1/97	10	APCL <0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0002	<0.0002	<0.0004	<0.0002
J11/15-TR01-3-S	TR02	3/1/97	10	APCL <0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0002	<0.0002	<0.0004	<0.0002
J11/15-TR01-4-S	TR02	3/1/97	5	APCL <0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0002	<0.0002	<0.0005	<0.0002
J11/15-TR03-1-S	TR03	3/1/97	5	APCL <0.0003	<0.0001	<0.0001	<0.0002	<0.0001	<0.0002	<0.0002	<0.0004	<0.0002
J11/15-TR03-2-S	TR03	3/1/97	5	APCL <0.0003	<0.0001	<0.0001	<0.0002	<0.0001	<0.0002	<0.0002	<0.0005	<0.0002
J11/15-TR03-3-S	TR03	3/1/97	5	APCL <0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0002	<0.0002	<0.0004	<0.0002
J11/15-TR04-1-S	TR04	3/1/97	5	APCL <0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0002	<0.0002	<0.0004	<0.0002
J11/15-TR04-2-S	TR04	3/1/97	5	APCL <0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0002	<0.0002	<0.0004	<0.0002
J11/15-TR05-1-S	TR05	2/28/97	5	APCL <0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0002	<0.0002	<0.0004	<0.0002

**VOOCs**  
Method 8260A (APCL)

Sample ID	Location ID	Sample Date	Depth (feet)	Lab	Organic Compounds					
					Naphthalene	o-Xylene	methylbenzene	Styrene	Toluene	trans-1,3-Dichloropropene
J11/15-TR05-2-S	TR05	2/28/97	5	APCL	<0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0002
J11/15-TR06-1-S	TR06	2/28/97	6	APCL	<0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0002
J11/15-TR06-2-S	TR06	2/28/97	5	APCL	<0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0002
J11/15-TR07-1-S	TR07	3/1/97	5	APCL	<0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0002
J11/15-TR07-2-S	TR07	3/1/97	5	APCL	<0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0002
J11/15-TR07-3-S	TR07	3/1/97	5	APCL	<0.0002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0002
Analyses						37	37	37	37	37
Detections						0	0	0	0	0
Minimum Concentration						0	0	0	0	0
Maximum Concentration						0	0	0	0	0
HWAD - PCG						3200	160000	NE	15	16000
HWAD - PCG Hits						0	0	0	NE	NE

Notes:  
NE = Not established.

Duplicate Samples:

J11/15-TP01-2-S is a duplicate sample of J11/15-TP01-1-S.

J11/15-TP06-2-S is a duplicate sample of J11/15-TP06-1-S.

J11/15-TP01-2-S is a duplicate sample of J11/15-TP01-1-S.

J11/15-TP03-2-S is a duplicate sample of J11/15-TP03-1-S.

Explosives  
Method 8330 (APCL)

Sample ID	Location ID	Sample Depth (feet)	Lab	Tetryl										
				2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Nitrotoluene	3-Nitrotoluene	4-Nitrotoluene	TMX	Nitrobenzene	RDX	TNT	mg/kg	mg/kg
<b>4-Amino-2,6-dinitrotoluene</b>														
J11/15-TP01-1-S	TP01	3/1/97	5	APCL	<0.015	<0.029	<0.046	<0.03	<0.065	<0.083	<0.071	<0.053	<0.063	<0.058
J11/15-TP01-2-S	TP01	3/1/97	5	APCL	<0.015	<0.029	<0.046	<0.03	<0.065	<0.083	<0.071	<0.053	<0.063	<0.058
J11/15-TP01-3-S	TP01	3/1/97	1.5	APCL	<0.013	<0.026	<0.04	<0.026	<0.057	<0.073	<0.063	<0.046	<0.056	<0.051
J11/15-TP02-1-S	TP02	3/1/97	5	APCL	<0.015	<0.029	<0.046	<0.03	<0.064	<0.082	<0.071	<0.052	<0.063	<0.057
J11/15-TP02-2-S	TP02	3/1/97	1.5	APCL	<0.014	<0.026	<0.042	<0.027	<0.059	<0.076	<0.065	<0.049	<0.058	<0.053
J11/15-TP03-1-S	TP03	3/1/97	5	APCL	<0.015	<0.028	<0.045	<0.03	<0.064	<0.082	<0.072	<0.052	<0.062	<0.057
J11/15-TP03-2-S	TP03	3/1/97	2	APCL	<0.015	<0.029	<0.046	<0.03	<0.065	<0.083	<0.072	<0.053	<0.064	<0.058
J11/15-TP04-1-S	TP04	2/28/97	5	APCL	<0.014	<0.028	<0.044	0.44	<0.062	<0.088	<0.08	<0.051	<0.061	<0.056
J11/15-TP04-2-S	TP04	2/28/97	2	APCL	3.2	<0.026	<0.041	<0.027	<0.058	<0.074	<0.064	<0.047	<0.062	<0.051
J11/15-TP05-1-S	TP05	3/1/97	5	APCL	<0.066	<0.036	<0.06	<0.045	<0.048	<0.092	<0.066	<0.045	<0.059	<0.052
J11/15-TP05-2-S	TP05	3/1/97	5	APCL	0.2	<0.034	<0.043	<0.046	<0.046	<0.089	<0.064	<0.053	<0.056	<0.05
J11/15-TP06-1-S	TP06	3/1/97	5	APCL	<0.061	<0.033	<0.055	<0.041	<0.044	<0.086	<0.061	<0.057	<0.063	<0.046
J11/15-TP06-2-S	TP06	3/1/97	5	APCL	<0.061	<0.033	<0.055	<0.041	<0.044	<0.086	<0.061	<0.057	<0.062	<0.051
J11/15-TP06-3-S	TP06	3/1/97	1.5	APCL	<0.062	<0.033	<0.056	<0.042	<0.045	<0.086	<0.062	<0.058	<0.064	<0.059
J11/15-TP07-1-S	TP07	2/28/97	5	APCL	6.89	<0.027	3.3	<0.028	<0.061	<0.079	<0.068	<0.055	<0.066	<0.056
J11/15-TP07-2-S	TP07	2/28/97	1.5	APCL	1.1	<0.026	0.35	<0.027	<0.058	<0.074	<0.064	<0.057	<0.063	<0.056
J11/15-TP08-1-S	TP08	2/28/97	5	APCL	<0.015	<0.028	<0.045	<0.029	<0.063	<0.081	<0.069	<0.058	<0.064	<0.057
J11/15-TP08-2-S	TP08	2/28/97	2	APCL	<0.014	<0.028	<0.044	<0.029	<0.062	<0.086	<0.068	<0.055	<0.065	<0.059
J11/15-TR01-1-S	TR01	3/1/97	5	APCL	<0.015	<0.029	<0.047	<0.03	<0.065	<0.084	<0.072	<0.068	<0.075	<0.07
J11/15-TR01-2-S	TR01	3/1/97	10	APCL	<0.014	<0.027	<0.044	<0.028	<0.061	<0.086	<0.079	<0.068	<0.074	<0.071
J11/15-TR01-3-S	TR01	3/1/97	10	APCL	<0.014	<0.027	<0.044	<0.028	<0.061	<0.081	<0.079	<0.068	<0.075	<0.072
J11/15-TR01-4-S	TR01	3/1/97	5	APCL	<0.015	<0.028	<0.045	<0.029	<0.062	<0.088	<0.079	<0.061	<0.069	<0.065
J11/15-TR01-5-S	TR01	3/1/97	10	APCL	<0.014	<0.028	<0.044	<0.031	<0.067	<0.086	<0.074	<0.065	<0.071	<0.069
J11/15-TR02-1-S	TR02	3/1/97	5	APCL	<0.015	<0.028	<0.045	<0.029	<0.063	<0.081	<0.07	<0.068	<0.072	<0.066
J11/15-TR02-2-S	TR02	3/1/97	5	APCL	<0.016	<0.028	<0.046	<0.031	<0.064	<0.083	<0.071	<0.065	<0.073	<0.068
J11/15-TR03-1-S	TR03	3/1/97	5	APCL	<0.017	<0.032	<0.052	<0.034	<0.072	<0.093	<0.08	<0.069	<0.079	<0.075
J11/15-TR03-2-S	TR03	3/1/97	5	APCL	<0.017	<0.032	<0.051	<0.033	<0.072	<0.092	<0.079	<0.061	<0.077	<0.073
J11/15-TR03-3-S	TR03	3/1/97	5	APCL	<0.016	<0.031	<0.049	<0.032	<0.069	<0.089	<0.076	<0.068	<0.077	<0.074
J11/15-TR04-1-S	TR04	3/1/97	5	APCL	<0.014	<0.027	<0.044	<0.028	<0.061	<0.079	<0.079	<0.065	<0.075	<0.072
J11/15-TR04-2-S	TR04	3/1/97	5	APCL	<0.013	<0.026	<0.041	<0.027	<0.068	<0.084	<0.074	<0.064	<0.077	<0.073

**Explosives**  
Method 8330 (APCL)

Sample ID	Location	Sample Depth (feet)	Lab	Tetryl													
				HMX	RDX	Nitrobenzene	Tetryl	RDX	Nitrobenzene	HMX	RDX	Nitrobenzene	Tetryl	RDX	Nitrobenzene		
J11/15-TR05-1-S	TR05	2/28/97	5	APCL	<0.014	<0.027	<0.043	<0.028	<0.061	<0.078	<0.067	<0.054	<0.049	NA	NA		
J11/15-TR05-2-S	TR05	2/28/97	5	APCL	<0.015	<0.029	<0.046	<0.03	<0.064	<0.083	<0.071	<0.053	<0.057	<0.052	NA	NA	
J11/15-TR06-1-S	TR06	2/28/97	6	APCL	<0.014	<0.027	<0.043	<0.028	<0.06	<0.077	<0.066	<0.077	<0.059	<0.054	<0.048	NA	NA
J11/15-TR06-2-S	TR06	2/28/97	5	APCL	<0.015	<0.029	<0.046	<0.03	<0.064	<0.082	<0.071	<0.062	<0.053	<0.057	<0.052	NA	NA
J11/15-TR07-1-S	TR07	3/1/97	5	APCL	<0.015	<0.029	<0.046	<0.03	<0.065	<0.083	<0.071	<0.083	<0.063	<0.058	<0.052	NA	NA
J11/15-TR07-2-S	TR07	3/1/97	5	APCL	<0.015	<0.029	<0.046	<0.03	<0.064	<0.083	<0.071	<0.083	<0.063	<0.057	<0.052	NA	NA
J11/15-TR07-3-S	TR07	3/1/97	5	APCL	<0.015	<0.028	<0.045	<0.03	<0.064	<0.082	<0.07	<0.082	<0.063	<0.057	<0.051	NA	NA
				37	37	37	37	37	37	37	37	37	37	37	37	0	0
Analyses				4	0	3	1	0	0	0	0	0	0	3	0	0	0
Detections				0.2	0	0.2	0.44	0	0	0	0	0	0	0.3	0	0	0
Minimum Concentration				6.89	0	3.3	0.44	0	0	0	0	0	0	1.3	0	0	0
Maximum Concentration																	
HWAD - PCG				4	8	233	2.6	80	800	800	4000	40	64	800	NE	NE	NE
HWAD - PCG Hits				1	0	0	0	0	0	0	0	0	0	0	0	0	0

Notes:

NA = Not analyzed.  
NE = Not established.

Duplicate Samples:  
J11/15-TP01-2-S is a duplicate sample of J11/15-TP01-1-S.  
J11/15-TP06-2-S is a duplicate sample of J11/15-TP06-1-S.  
J11/15-TR01-2-S is a duplicate sample of J11/15-TR01-1-S.  
J11/15-TR03-2-S is a duplicate sample of J11/15-TR03-1-S.

Explosives  
Method 8330 (Datachem)

Sample ID	Location ID	Sample Date	Depth (feet)	Lab							
					1,3,5-Trinitrobenzene	1,3-Dinitrobenzene	2,4,6-Trinitrotoluene	2,4-Dinitrotoluene	2,6-Dinitrotoluene	3-Nitrotoluene	4-Nitrotoluene
J11/15-DP083	SS09	7/16/94	0	Datachem	<0.09	<0.04	<0.19	<0.17	<0.46	<0.39	<0.74
J11/15-DP094	SS05	7/17/94	0	Datachem	<0.09	<0.04	<0.19	<0.17	<0.46	<0.39	<0.74
<hr/>					2	2	2	2	2	2	2
<hr/>					Analyses	Detections	Minimum Concentration	Maximum Concentration	HWAD - PCG	HWAD - PCG Hits	
<hr/>					0	0	0	0	4	0	2
<hr/>					0	0	0	0	8	0	0
<hr/>					0	0	0	0	233	800	800
<hr/>					0	0	0	0	0	0	4000
<hr/>					0	0	0	0	0	0	40
<hr/>					0	0	0	0	0	0	64
<hr/>					0	0	0	0	0	0	800
<hr/>					0	0	0	0	0	0	0

Duplicate Samples:  
 J11/15-DP083 is a duplicate sample of J11/15-SS09-1-S.  
 J11/15-DP094 is a duplicate sample of J11/15-SS05-1-S.

RDX Test Kit  
Method 8510 (Tt Field)

Sample ID	Location ID	Sample Date	Depth (feet)	Lab	RDX	RDX-Dup	RDX (Rerun)
					mg/kg	mg/kg	mg/kg
J11/15-TP01-1-S	TP01	3/1/97	5	Tt Field	25.51	NA	NA
J11/15-TP01-2-S	TP01	3/1/97	5	Tt Field	25.87	NA	NA
J11/15-TP01-3-S	TP01	3/1/97	1.5	Tt Field	30.17	NA	NA
J11/15-TP02-1-S	TP02	3/1/97	5	Tt Field	5.29	NA	NA
J11/15-TP02-2-S	TP02	3/1/97	1.5	Tt Field	19.78	NA	NA
J11/15-TP03-1-S	TP03	3/1/97	5	Tt Field	3.16	NA	NA
J11/15-TP03-2-S	TP03	3/1/97	2	Tt Field	3.12	NA	NA
J11/15-TP04-1-S	TP04	2/28/97	5	Tt Field	25.3	NA	NA
J11/15-TP04-2-S	TP04	2/28/97	2	Tt Field	74.1	NA	NA
J11/15-TP05-1-S	TP05	3/1/97	5	Tt Field	14.7	NA	NA
J11/15-TP05-2-S	TP05	3/1/97	5	Tt Field	51.56	NA	NA
J11/15-TP06-1-S	TP06	3/1/97	5	Tt Field	2.67	NA	NA
J11/15-TP06-2-S	TP06	3/1/97	5	Tt Field	18.58	NA	NA
J11/15-TP06-3-S	TP06	3/1/97	1.5	Tt Field	18.58	NA	NA
J11/15-TP07-1-S	TP07	2/28/97	5	Tt Field	10.1	NA	NA
J11/15-TP07-2-S	TP07	2/28/97	1.5	Tt Field	49.8	NA	NA
J11/15-TP08-1-S	TP08	2/28/97	5	Tt Field	39.3	NA	NA
J11/15-TP08-2-S	TP08	2/28/97	2	Tt Field	33.7	NA	NA
J11/15-TR01-1-S	TR01	3/1/97	5	Tt Field	2.36	NA	NA
J11/15-TR01-2-S	TR01	3/1/97	10	Tt Field	1.07	NA	NA
J11/15-TR01-3-S	TR01	3/1/97	10	Tt Field	1.24	NA	NA
J11/15-TR01-4-S	TR01	3/1/97	5	Tt Field	3.87	NA	NA
J11/15-TR01-5-S	TR01	3/1/97	10	Tt Field	1.69	NA	NA
J11/15-TR02-1-S	TR02	3/1/97	5	Tt Field	1.02	NA	NA
J11/15-TR02-2-S	TR02	3/1/97	5	Tt Field	11.5	NA	NA
J11/15-TR03-1-S	TR03	3/1/97	5	Tt Field	50.4	NA	NA
J11/15-TR03-2-S	TR03	3/1/97	5	Tt Field	9.02	NA	NA
J11/15-TR03-3-S	TR03	3/1/97	5	Tt Field	13	NA	NA
J11/15-TR04-1-S	TR04	3/1/97	5	Tt Field	4	NA	NA
J11/15-TR04-2-S	TR04	3/1/97	5	Tt Field	23.56	NA	NA
J11/15-TR05-1-S	TR05	2/28/97	5	Tt Field	8.58	NA	NA
J11/15-TR05-2-S	TR05	2/28/97	5	Tt Field	21.8	NA	NA
J11/15-TR06-1-S	TR06	2/28/97	6	Tt Field	11.2	NA	NA
J11/15-TR06-2-S	TR06	2/28/97	5	Tt Field	24.4	NA	NA
J11/15-TR07-1-S	TR07	3/1/97	5	Tt Field	2.27	NA	NA
J11/15-TR07-2-S	TR07	3/1/97	5	Tt Field	2.62	NA	NA
J11/15-TR07-3-S	TR07	3/1/97	5	Tt Field	5.64	NA	NA
<b>Analyses</b>					37	0	0
<b>Detections</b>					37	0	0
<b>Minimum Concentration</b>					1.02	0	0
<b>Maximum Concentration</b>					74.1	0	0
<b>HWAD - PCG</b>					64	NE	NE
<b>HWAD - PCG Hits</b>					1	NE	NE

**Notes:**

NA = Not analyzed.

NE = Not established.

**Duplicate Samples:**

J11/15-TP01-2-S is a duplicate sample of J11/15-TP01-1-S.  
J11/15-TP06-2-S is a duplicate sample of J11/15-TP06-1-S.  
J11/15-TR01-2-S is a duplicate sample of J11/15-TR01-1-S.  
J11/15-TR03-2-S is a duplicate sample of J11/15-TR03-1-S.

TNT Test Kit  
Method 8515 (Tt Field)

Sample ID	Location ID	Date	Depth (feet)	Lab	2,4,6-TNT		
					mg/kg	mg/kg	mg/kg
J11/15-TP01-1-S	TP01	3/1/97	5	Tt Field	< 0.8	NA	NA
J11/15-TP01-2-S	TP01	3/1/97	5	Tt Field	< 0.8	NA	NA
J11/15-TP01-3-S	TP01	3/1/97	1.5	Tt Field	< 0.8	NA	NA
J11/15-TP02-1-S	TP02	3/1/97	5	Tt Field	< 0.8	NA	NA
J11/15-TP02-2-S	TP02	3/1/97	1.5	Tt Field	< 0.8	NA	NA
J11/15-TP03-1-S	TP03	3/1/97	5	Tt Field	< 0.8	NA	NA
J11/15-TP03-2-S	TP03	3/1/97	2	Tt Field	< 0.8	NA	NA
J11/15-TP04-1-S	TP04	2/28/97	5	Tt Field	< 0.8	NA	NA
J11/15-TP04-2-S	TP04	2/28/97	2	Tt Field	5.48	NA	NA
J11/15-TP05-1-S	TP05	3/1/97	5	Tt Field	< 0.8	NA	NA
J11/15-TP05-2-S	TP05	3/1/97	5	Tt Field	< 0.8	NA	NA
J11/15-TP06-1-S	TP06	3/1/97	5	Tt Field	< 0.8	NA	NA
J11/15-TP06-2-S	TP06	3/1/97	5	Tt Field	< 0.8	NA	NA
J11/15-TP06-3-S	TP06	3/1/97	1.5	Tt Field	< 0.8	NA	NA
J11/15-TP07-1-S	TP07	2/28/97	5	Tt Field	11.9	NA	NA
J11/15-TP07-2-S	TP07	2/28/97	1.5	Tt Field	10.7	NA	NA
J11/15-TP08-1-S	TP08	2/28/97	5	Tt Field	< 0.8	NA	NA
J11/15-TP08-2-S	TP08	2/28/97	2	Tt Field	< 0.8	NA	NA
J11/15-TR01-1-S	TR01	3/1/97	5	Tt Field	< 0.8	NA	NA
J11/15-TR01-2-S	TR01	3/1/97	10	Tt Field	< 0.8	NA	NA
J11/15-TR01-3-S	TR01	3/1/97	10	Tt Field	< 0.8	NA	NA
J11/15-TR01-4-S	TR01	3/1/97	5	Tt Field	< 0.8	NA	NA
J11/15-TR01-5-S	TR01	3/1/97	10	Tt Field	< 0.8	NA	NA
J11/15-TR02-1-S	TR02	3/1/97	5	Tt Field	< 0.8	NA	NA
J11/15-TR02-2-S	TR02	3/1/97	5	Tt Field	< 0.8	NA	NA
J11/15-TR03-1-S	TR03	3/1/97	5	Tt Field	< 0.8	NA	NA
J11/15-TR03-2-S	TR03	3/1/97	5	Tt Field	< 0.8	NA	NA
J11/15-TR03-3-S	TR03	3/1/97	5	Tt Field	< 0.8	NA	NA
J11/15-TR04-1-S	TR04	3/1/97	5	Tt Field	< 0.8	NA	NA
J11/15-TR04-2-S	TR04	3/1/97	5	Tt Field	< 0.8	NA	NA
J11/15-TR05-1-S	TR05	2/28/97	5	Tt Field	< 0.8	NA	NA
J11/15-TR05-2-S	TR05	2/28/97	5	Tt Field	< 0.8	NA	NA
J11/15-TR06-1-S	TR06	2/28/97	6	Tt Field	< 0.8	NA	NA
J11/15-TR06-2-S	TR06	2/28/97	5	Tt Field	< 0.8	NA	NA
J11/15-TR07-1-S	TR07	3/1/97	5	Tt Field	< 0.8	NA	NA
J11/15-TR07-2-S	TR07	3/1/97	5	Tt Field	< 0.8	NA	NA
J11/15-TR07-3-S	TR07	3/1/97	5	Tt Field	< 0.8	NA	NA
<b>Analyses</b>					37	0	0
<b>Detections</b>					3	0	0
<b>Minimum Concentration</b>					5.48	0	0
<b>Maximum Concentration</b>					11.9	0	0
<b>HWAD - PCG</b>					233	NE	NE
<b>HWAD - PCG Hits</b>					0	NE	NE

Notes:

NA = Not analyzed.

NE = Not established.

Duplicate Samples:

J11/15-TP01-2-S is a duplicate sample of J11/15-TP01-1-S.

J11/15-TP06-2-S is a duplicate sample of J11/15-TP06-1-S.

J11/15-TR01-2-S is a duplicate sample of J11/15-TR01-1-S.

J11/15-TR03-2-S is a duplicate sample of J11/15-TR03-1-S.

TPH  
Method 8015M (APCL)

Sample ID	Location ID	Sample Depth		Lab	C11-C22 (Diesel)	C23-C30 (Motor oil)	C31-C40 (Heavy oil)	C8-C10 (Gasoline)	Diesel Fuel
		Date	(feet)		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
J11/15-TP03-2-S	TP03	3/1/97	2	APCL	<0.94	<0.43	<0.32	<0.17	NA
J11/15-TP07-1-S	TP07	2/28/97	5	APCL	14	30	21	<0.16	NA
J11/15-TR01-1-S	TR01	3/1/97	5	APCL	<0.95	<0.43	<0.33	<0.18	NA
J11/15-TR03-3-S	TR03	3/1/97	5	APCL	<1	<0.46	<0.34	<0.18	NA
J11/15-TR07-3-S	TR07	3/1/97	5	APCL	<0.92	<0.42	<0.32	<0.17	NA
<b>Analyses</b>					5	5	5	5	0
<b>Detections</b>					1	1	1	0	0
<b>Minimum Concentration</b>					14	30	21	0	0
<b>Maximum Concentration</b>					14	30	21	0	0
<b>HWAD - PCG</b>					100	NE	NE	NE	100
<b>HWAD - PCG Hits</b>					0	NE	NE	NE	0

**Notes:**

NA = Not analyzed.

NE = Not established.

**Explosives**  
Method 8330M (APCL)

Sample ID	Location ID	Date	Depth (feet)	Lab	Picric Acid mg/kg
J11/15-TP01-1-S	TP01	3/1/97	5	APCL	<0.78
J11/15-TP01-2-S	TP01	3/1/97	5	APCL	<0.78
J11/15-TP01-3-S	TP01	3/1/97	1.5	APCL	<0.69
J11/15-TP02-1-S	TP02	3/1/97	5	APCL	<0.78
J11/15-TP02-2-S	TP02	3/1/97	1.5	APCL	<0.72
J11/15-TP03-1-S	TP03	3/1/97	5	APCL	<0.77
J11/15-TP03-2-S	TP03	3/1/97	2	APCL	<0.79
J11/15-TP04-1-S	TP04	2/28/97	5	APCL	<0.76
J11/15-TP04-2-S	TP04	2/28/97	2	APCL	<0.7
J11/15-TP05-1-S	TP05	3/1/97	5	APCL	<0.74
J11/15-TP05-2-S	TP05	3/1/97	5	APCL	<0.71
J11/15-TP06-1-S	TP06	3/1/97	5	APCL	<0.68
J11/15-TP06-2-S	TP06	3/1/97	5	APCL	<0.68
J11/15-TP06-3-S	TP06	3/1/97	1.5	APCL	<0.69
J11/15-TP07-1-S	TP07	2/28/97	5	APCL	<0.74
J11/15-TP07-2-S	TP07	2/28/97	1.5	APCL	<0.7
J11/15-TP08-1-S	TP08	2/28/97	5	APCL	<0.76
J11/15-TP08-2-S	TP08	2/28/97	2	APCL	<0.75
J11/15-TR01-1-S	TR01	3/1/97	5	APCL	<0.79
J11/15-TR01-2-S	TR01	3/1/97	10	APCL	<0.74
J11/15-TR01-3-S	TR01	3/1/97	10	APCL	<0.74
J11/15-TR01-4-S	TR01	3/1/97	5	APCL	<0.77
J11/15-TR01-5-S	TR01	3/1/97	10	APCL	<0.75
J11/15-TR02-1-S	TR02	3/1/97	5	APCL	<0.81
J11/15-TR02-2-S	TR02	3/1/97	5	APCL	<0.76
J11/15-TR03-1-S	TR03	3/1/97	5	APCL	<0.88
J11/15-TR03-2-S	TR03	3/1/97	5	APCL	<0.87
J11/15-TR03-3-S	TR03	3/1/97	5	APCL	<0.84
J11/15-TR04-1-S	TR04	3/1/97	5	APCL	<0.74
J11/15-TR04-2-S	TR04	3/1/97	5	APCL	<0.7
J11/15-TR05-1-S	TR05	2/28/97	5	APCL	<0.74
J11/15-TR05-2-S	TR05	2/28/97	5	APCL	<0.78
J11/15-TR06-1-S	TR06	2/28/97	6	APCL	<0.73
J11/15-TR06-2-S	TR06	2/28/97	5	APCL	<0.78
J11/15-TR07-1-S	TR07	3/1/97	5	APCL	<0.78
J11/15-TR07-2-S	TR07	3/1/97	5	APCL	<0.78
J11/15-TR07-3-S	TR07	3/1/97	5	APCL	<0.77
<hr/>					
Analyses					37
Detections					0
Minimum Concentration					0
Maximum Concentration					0
<hr/>					
HWAD - PCG					NE
HWAD - PCG Hits					NE
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Notes:

NE = Not established.

Duplicate Samples:

J11/15-TP01-2-S is a duplicate sample of J11/15-TP01-1-S.

J11/15-TP06-2-S is a duplicate sample of J11/15-TP06-1-S.

J11/15-TR01-2-S is a duplicate sample of J11/15-TR01-1-S.

J11/15-TR03-2-S is a duplicate sample of J11/15-TR03-1-S.

## **Appendix D**



J-11/15, View to northeast from northwest corner of dirt road, showing graded and levelled ground surface. #R2-P8/94, 11/2/93

**November 1993**



**February 2000**